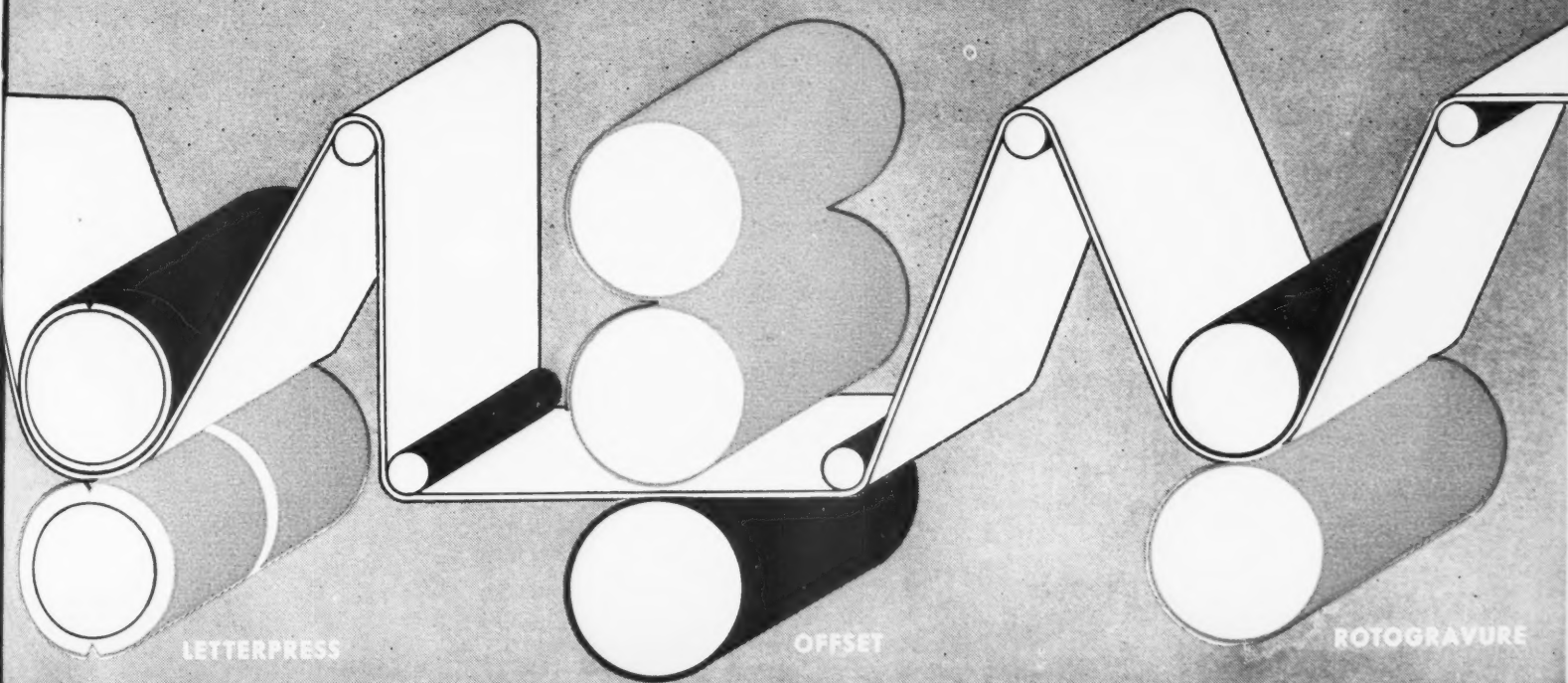


# Printing Equipment

*Engineer*



JULY 1946

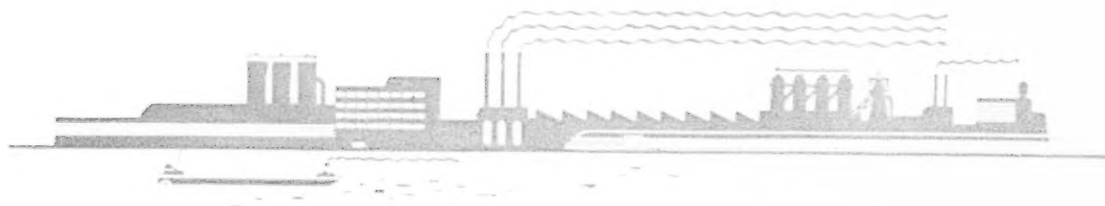


LETTERPRESS

OFFSET

ROTOGRAVURE

▶ HOW OFFSET LITHOGRAPHY SERVES INDUSTRY



# House organs...

TO EMPLOYEES

AND CUSTOMERS



▶ House Organs help show employees and customers how the business ticks. Interesting photographs, sketches and news stories emphasize the human relationships that make up a successful business. Offset lithography—colorful, fast and economical—is the ideal method of reproduction for House Organs, large and small.

The beautiful color and halftone work being turned out on the new Harris 17 x 22" Offset Press, with its four form rollers and tight adjustments, makes it the perfect press for small and moderate sized runs of company House Organs. An experienced lithographer with six large Harris Presses, after his first month's experience with the new 17 x 22", sent us samples of a superb company publication job with the penciled comment—"This little press is *it!*"

*Harris Presses give you a better run for your money!*

*Our new 24-page, 4-color booklet, "Why Offset Lithography is On the March", has been printed on the new 17 x 22" Harris Press. Prepared especially for the small offset or the combination shop, it will also interest larger lithographers as a sample of work. Write for it today.*

## HARRIS-SEYBOLD

Harris-Seybold Company • General Offices, Cleveland 5, Ohio

HARRIS PRESSES • SEYBOLD CUTTERS • OTHER EQUIPMENT FOR THE GRAPHIC ARTS

## PROUDLY PRESENTING THE NEW STA-HI VACUUM FLAT CASTING BOX



*Deliveries are now being made on this new box, with orders scheduled for shipment in rotation as they are received . . .*

*Many loyal Sta-Hi customers have waited months for this good news, having placed their orders during the war or shortly after V-Day . . .*

*Their patience will be rewarded when they install this fine new equipment, modern and efficient in every detail . . .*

*If you do not now have one of these machines on order, let us tell you why you should . . .*



STA-HI  
CORPORATION  
LOS ANGELES, CALIF.



...STA-HI MASTER FORMER



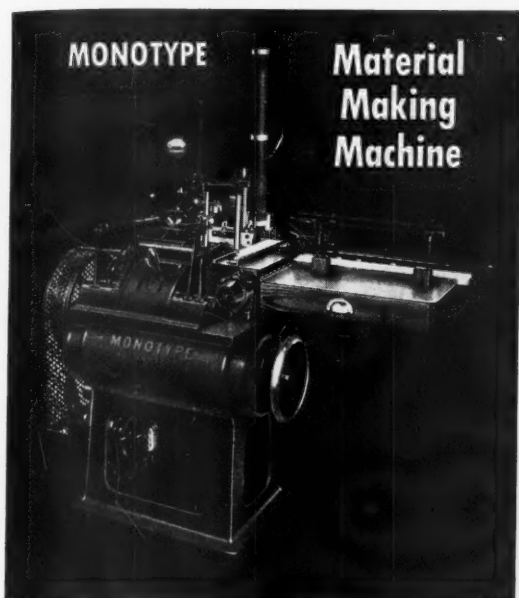
PREMIER ROTARY SHAVER...



STA-HI CORPORATION • LOS ANGELES 21

*The Most Versatile*

# STRIP-MATERIAL MACHINE *in the World*



★

## New Improved Monotype Material Making Machine

A FEW FULLY GUARANTEED FACTORY REBUILT MACHINES ALSO AVAILABLE ON ORDER

### *Continuous-Strip Material*

(CAST IN STRIPS OR CUT TO MEASURE)

**Straight-Line Rules**—250 designs and sizes from 1½ to 18 point, inclusive. Send for Specimens.

**Leads and Slugs**—Either "high" or "low," in all sizes from 1 point to 18 point, inclusive.

**"High" and "Low" Base**—In 12, 14, 16, 18, 24, 30 and 36 point (strips 24 inches long).

**Flush-Side and Full Face Rules**—Cast flush on one or both sides; ½ to 12 point body.

**Want-Ad Rules**—Special drive for resisting mat pressure; ½ and 2 point.

**Ornamental Borders**—200 designs and sizes from 2 to 12 point, inclusive. Send for Specimen Sheets showing the available designs.

**Wavy Rule**—Several weights of rule face; sizes from 2 to 12 point.

**Broaching Rules**—With special shoulder, several weights and sizes.

**Tie-Up Slugs**—12 to 36 point, any height.

**Electrotype Bearers**—12 and 18 point. With firm name repeated to identify foundry forms.

### *One-Cast Single-Column Material*

(NOT MADE ON OTHER STRIP MACHINES)

**Leads and Slugs**—½ to 12 point, measures up to 15 picas in length.

**Straight-Line and Want-Ad Rules**—Many weights of face; ½ to 6 point sizes; measures up to 15 picas in length.

**Centered Dashes**—A variety of designs and weights; sizes from 3 to 14 point; centered on measures up to 15 picas in length.

**Single-Piece Braces**—Centered on measures from 4 picas to 15 picas.

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**Decorative End Rules**—A variety of corner designs and rule faces in sizes from 3 to 6 point; made to match in weight and position.

## LANSTON MONOTYPE MACHINE COMPANY

MONOTYPE BUILDING, TWENTY-FOURTH AND LOCUST STREETS, PHILADELPHIA 3, PENNA.

Composed in Monotype 20th Century Family and Monotype Stylescript, No. 425

When writing the advertiser please mention PRINTING EQUIPMENT *Engineer*—July 1946

3

**SAM'L BINGHAM'S SON MFG. CO.**

MANUFACTURERS OF

**PRINTERS' ROLLERS  
LITHO-OFFSET ROLLERS**

**RUBBER  
NON-MELTABLE  
FABRIC-COVERED  
ROTOGRAVURE**

**ROLLERS**

**OFFSET  
COMPOSITION  
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**PRINTERS ROLLERS**

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NATURAL RUBBER; VULCANIZED OIL

**FOR EVERY PRINTING PURPOSE**



**WE ARE NOW MAKING COMPOSITION ROLLERS  
FOR SUMMER USE**

**SHIP YOUR OLD ROLLERS  
TO FACTORY MOST CONVENIENT TO YOU**

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CLEVELAND 14  
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HOUSTON 6  
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KANSAS CITY 6  
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NASHVILLE 3**

**OKLAHOMA CITY 6  
PITTSBURGH 3  
ST. LOUIS 2  
SPRINGFIELD, O.**

*Roller Makers since 1847*

# PRINTING EQUIPMENT *Engineer*

Volume 72

Number 4



A technical publication for the mechanical executive responsible for printing production, equipment and supplies in the commercial, magazine, private plant and daily newspaper field.

PRINTING EQUIPMENT Engineer, Published monthly at 1276 West Third St., Cleveland 13, Ohio, Copyright 1946 by Willsea Publishing Co.

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Printed in U.S.A.

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## TECHNICAL BOOKS

**STANDARD BOOK ON ESTIMATING for PRINTERS**—By Fred W. Hoch. Revised 1941 edition. This book is a primer for students and a reference for printers and estimators. Every printing plant should have a copy. Author explains all operations in commercial printing plant and shows production time allowance for each in hours and decimal hours. Size, 6 in. by 9½ in., 268 pages, \$3.75 per copy, cash with order.

**PRINTING INKS**—Their Chemistry and Technology—By Carleton Ellis. Bound in cloth, 6 in. by 9½ in., 560 pages, well illustrated. For printing executives, pressmen, photo-engravers, platemakers, ink manufacturers, chemists, paper-makers. Author stays close to printing plant. The solving of new production problems brought about by technological improvements, both in equipment and inks, created the urgent need for this book. Price \$7, cash with order.

**THE PRACTICE OF PRESSWORK**—By Craig R. Spicher. We offer copies to our readers, at the special price of \$4.00 per copy, cash with order. No printer should be without a copy (9000 copies printed).

**LITHOGRAPHERS MANUAL**—Compiled by Walter E. Soderstrom. Second revised edition. Technical information from copy to finished job. Nationally known technical men contributed the bulk of practical camera, platemaking and presswork information. Size 8½ in. by 11¼ in. Bound in red cloth, gold stamped. Many of the 368 pages are illustrated. Price \$5 per copy, cash with order.

**PHOTOGRAVURE**—By H. Mills Cartwright. Covers all of photogravure's basic principles in concise and readable language. Rotogravure receives minor discussion but this is generally considered best textbook on photogravure process. Contains 202 pages, 34 illustrations, maroon cloth-size 6¾ in. by 9¾ in., \$3.50 per copy, cash with order.

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#### HOW TO ADJUST WORK-UPS—By Wm. H.

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#### READING AS A VISUAL TASK—By Matthew

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## PRINTING EQUIPMENT *Engineer*

1276 West 3rd Street, Cleveland 13, Ohio



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FOR BETTER  
NEWSPAPER  
PRINTING**

They're specially built for the job. That's why AMERICAN SYNTHETIC RUBBER ROLLERS have been so signally successful. On hundreds of newspaper, magazine, rotary and offset presses they're rendering splendid performances every day... showing exceptional endurance, remarkable ink-distributing ability and a definite faculty for producing sharp impressions. Too, they're proving they don't lip; hold diameter perfectly in heat, cold, humidity; set easily and stay set. All in all, they're great rollers. Order a set... you'll like them.

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# American **SYNTHETIC RUBBER** Rollers





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Only with the Ludlow can all these advantages, and many others, be fully realized and turned into profits

**LUDLOW TYPOGRAPH COMPANY** 2032 Clybourn Ave., Chicago 14



## RESEARCH BEGUN A QUARTER-CENTURY AGO

In 1921 the Burgess Laboratories began laboratory research on the manufacturing of stereotyping mats. The first dry mats had been manufactured in the United States only a few years earlier—in 1917. So that Burgess had no precedents to follow, in attacking the problem of producing a superior mat.

This proved, actually, an aid in achieving success, for no “it-can’t-be-done” inhibitions hampered them. They started with completely open minds—and ample financial backing for wide research and experimenting.

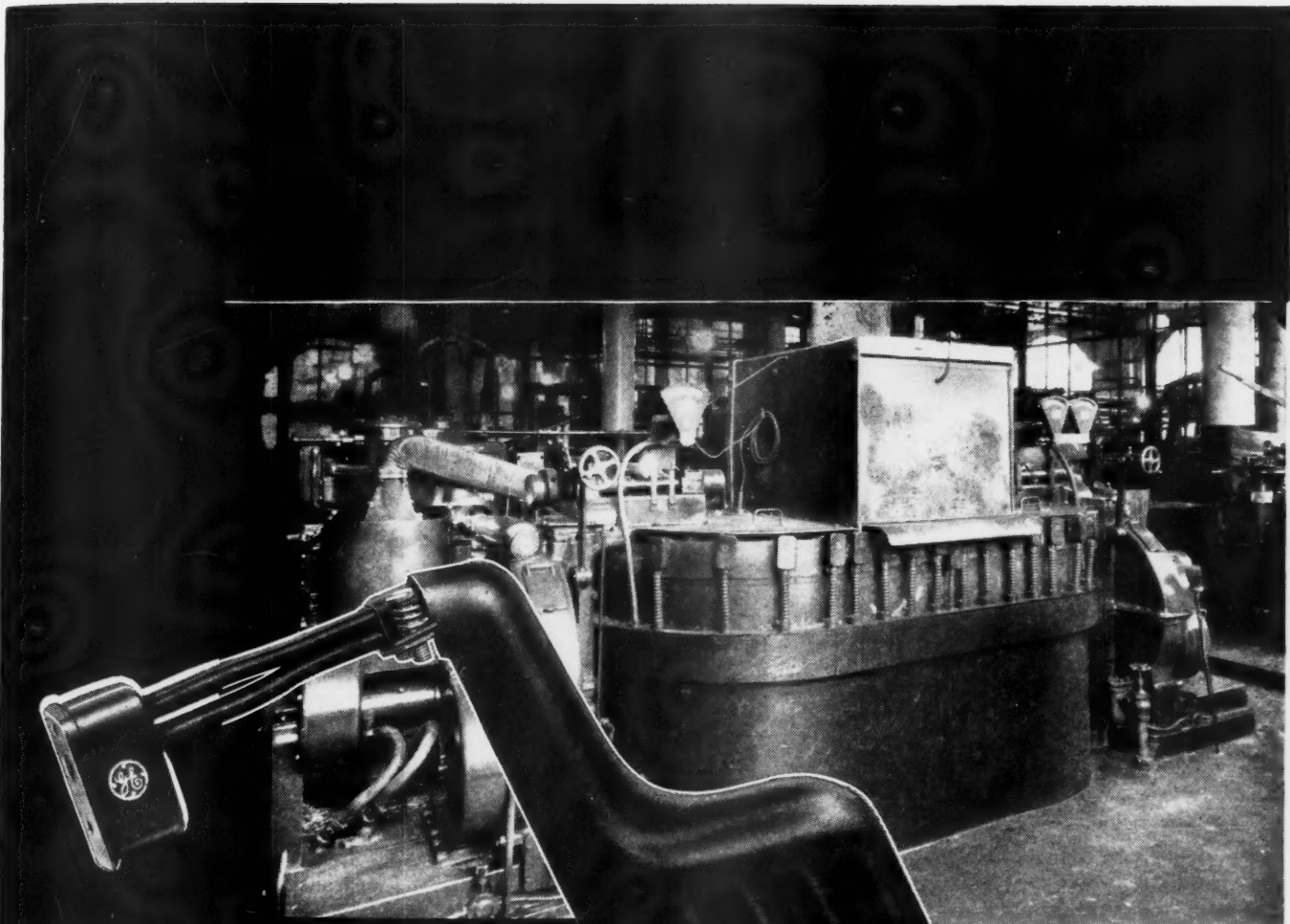
Today, despite the long-established superiority of Burgess Chrome Mats, the research, the experimenting, still continue. To make Burgess Mats even better, is the aim!



# BURGESS CELLULOSE COMPANY

*Manufacturers and Distributors of Burgess Chrome and Tone-Tex Mats*  
**FREEPORT, ILLINOIS**

**Pacific Coast Representative RALPH LEBER CO., 426 Polson Bldg., SEATTLE, WASH.**



...with **G-E CALROD\***  
**IMMERSION HEATERS**

G.E. furnishes electric heaters and control equipment for use with the standard models of these five leading manufacturers of stereotype furnaces:

- Duplex Printing Press Co.
- Goss Printing Press Co.
- Hoe & Co.
- Walter Scott & Co.
- Wood Newspaper Machinery Corp.

Whether you are making plans for a new printing plant or for modernizing your present one, you will want to investigate electric stereotype-melting—the method that affords these important advantages:

1. **Uniform Printing**
2. **Increased Production**
3. **Cleaner, Cooler Working Conditions**
4. **Accurate, Automatic Temperature Control**
5. **Less Dross**

Calrod immersion heaters, when equipped with automatic control equipment, provide all these benefits and many more. These heaters are immersed directly into the stereotype metal, and with their fast-heating characteristic, the metal is brought up quickly to its working temperature.

By means of automatic temperature controls, uniform heat distribution is assured, and dross is substantially reduced. Clear-cut plates result,

\*Reg. U.S. Pat. Off.

thereby improving the general appearance of the printed matter.

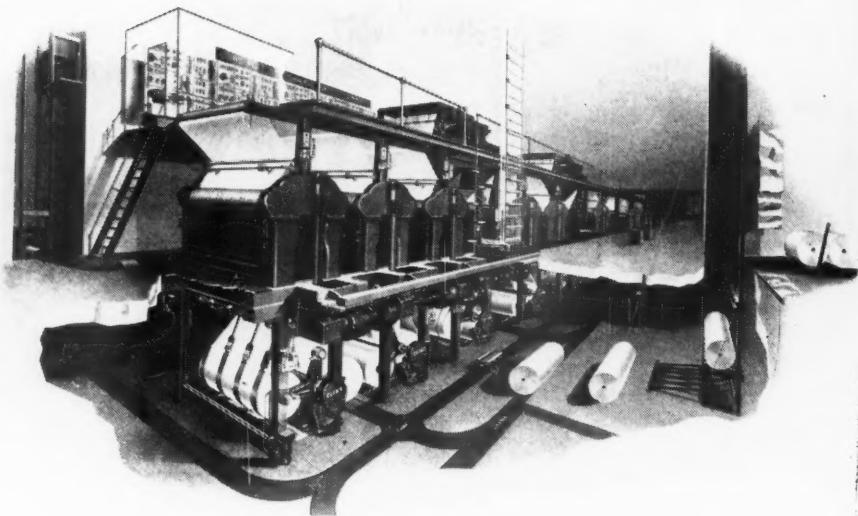
The operation of this equipment is silent, and with the elimination of flues, working conditions are cleaner and cooler.

Approximately 300 newspapers and printing houses have already installed or converted to these reliable Calrod immersion heaters for faster, more efficient stereotype melting. And, in several of the busiest plants where conversion was required, electric installations were made in *one weekend*.

For more detailed information on selecting and applying G-E immersion heaters, contact the heating specialist in a G-E Office near you. Or, write for free Bulletin GEA-4653. Address Apparatus Dept., General Electric Company, Schenectady 5, New York.

**GENERAL**  **ELECTRIC**  
675-141-8709

# CLINE



*Typical Cline Unit Drive and Power Control Installation*

## UNIT TYPE PRESS DRIVES . . . PROVIDE 7 Point Security

Here are 7 tangible reasons why Cline alternating current, unit type press drives with full automatic push button control are standard equipment in many of the world's best equipped pressrooms.

**1. SAFETY AND RELIABILITY**—Are assured in design of circuit and arrangement of apparatus, and by the use of substantial Cline-Westinghouse oversize control parts for all circuits.

**2. SPEED AND POWER**—Cline-Westinghouse equipment is selected for power and speed to meet the demand of the press it operates.

**3. NO PRESS DRIVE SHAFT**—With the unit type press drive, power is applied directly to the point where it is used. This is the most logical and direct way, and the most efficient.

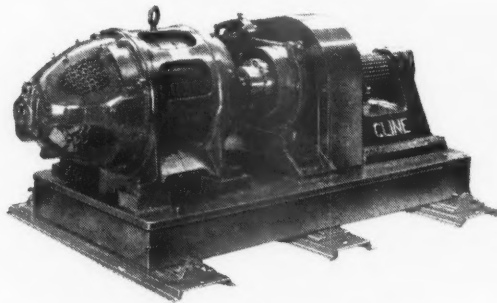
**4. NO BACK LASH**—Perfect control of load of each unit motor prevents erratic acceleration or deceleration which might cause a back lash and a subsequent web break.

**5. PERFECT ACCELERATION**—Positive, smooth control is assured because there is never any more or less power applied to the press than required. Erratic acceleration due to variation in

the load is entirely eliminated.

**6. PERFECT AUTOMATIC BRAKE**—Each motor on each unit is a controlled brake that stops the press in a pre-determined time. This type of drive eliminates the need for cylinder brakes on the press, and insures perfect slow down.

**7. MINIMUM POWER USED**—Since each motor drives one unit and one folder it is only in use when that part of the press is operating; and because of the omission of the press shaft, the Unit Type of drive uses a minimum of power.



*CLINE-WESTINGHOUSE Double Motor Press Drive — large size.*

*For safety, service and satisfaction specify Cline Systems the next time you consider new press equipment.*

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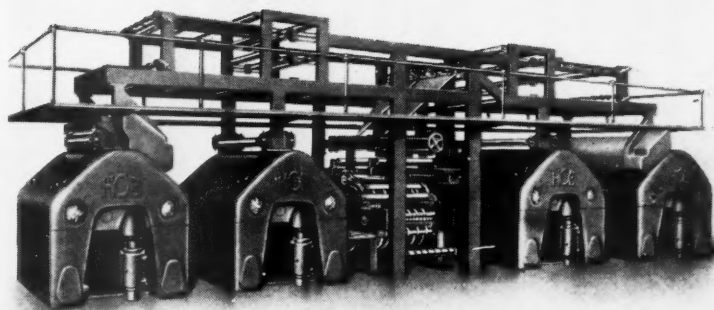
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Crocker First Natl. Bank Bldg.  
San Francisco 4, Calif.



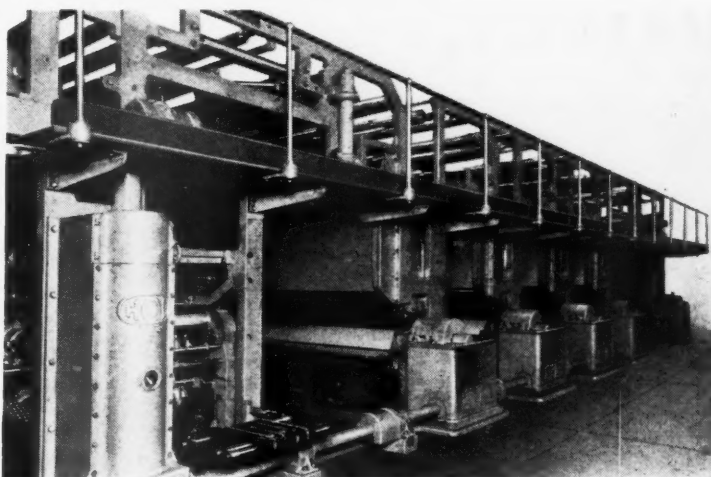
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New York 17, N. Y.

Every  
color  
demand

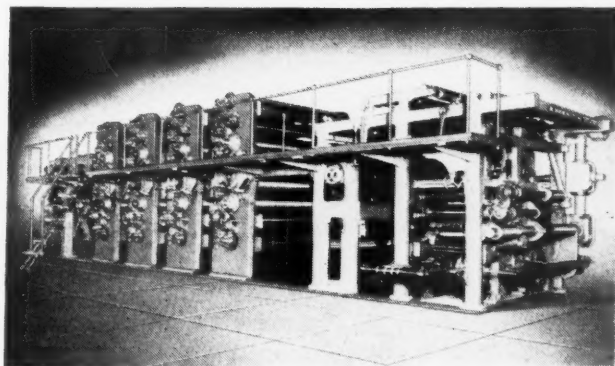
for advertisements,  
comic sections and  
color supplements  
is met by  
**HOE PRESSES**



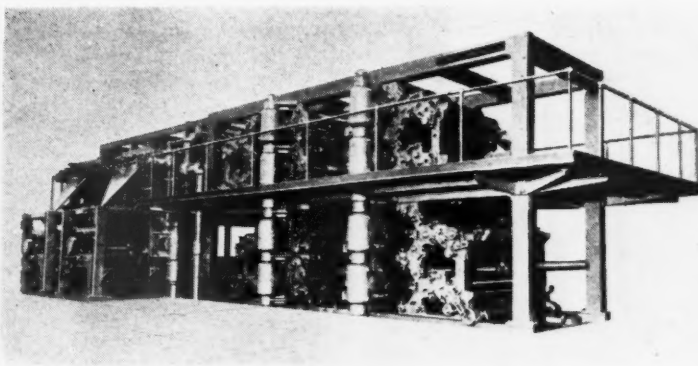
**COLOR-CONVERTIBLE NEWSPAPER PRESS** — With this Hoe press you do not need to pay initially for color equipment not immediately required, since the press is *pre-engineered* to provide additional colors *where* and *when* you want them. Extra color providing mechanisms are relatively simple additions when desired.



**MULTI-COLOR ROTOGRAVURE PRESS** — The popular rotogravure section of most newspapers, both one-color and multi-color, is produced by Hoe Super-Production Multi-Color Rotogravure Presses.



**WEB OFFSET PRESS** — A 16-page standard size newspaper, with any combination of four colors on every page, can be produced on this 4-Unit Hoe Web Perfecting Offset Press.



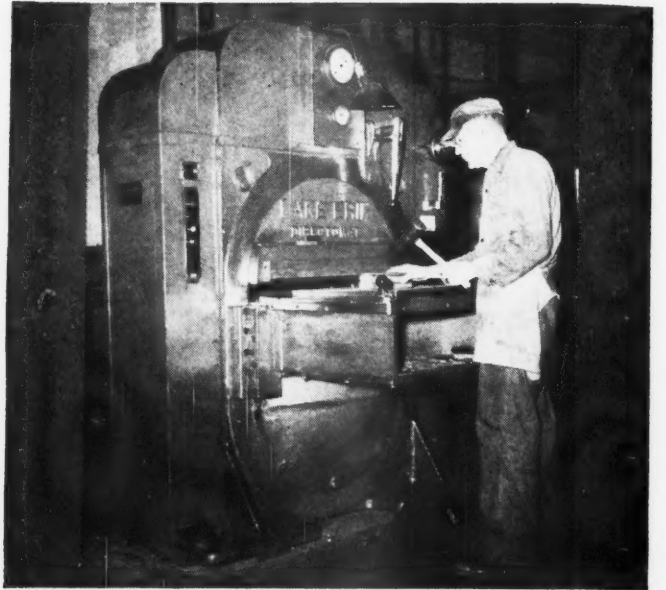
**MULTI-COLOR NEWSPAPER PRESS** — An example of the most up-to-date equipment used to print color supplements and comic sections in this Hoe close coupled Multi-Color Newspaper Press.

**R. HOE & CO., INC.**

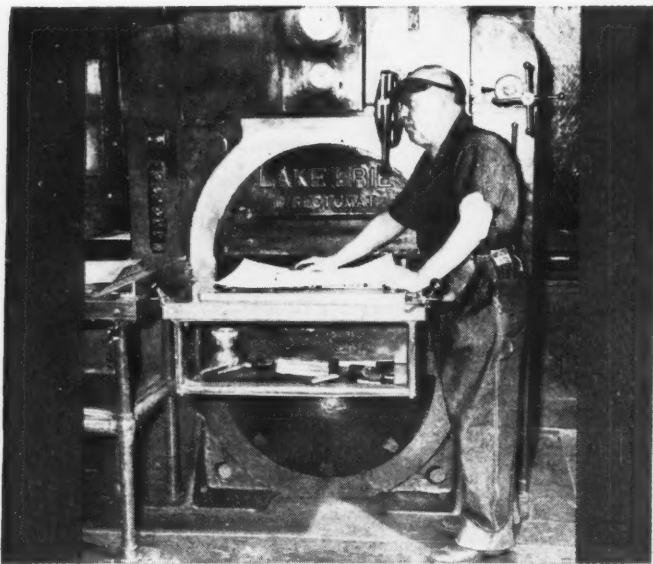
910 East 138th Street, New York 54, N. Y.

Branches: Boston • Chicago • San Francisco

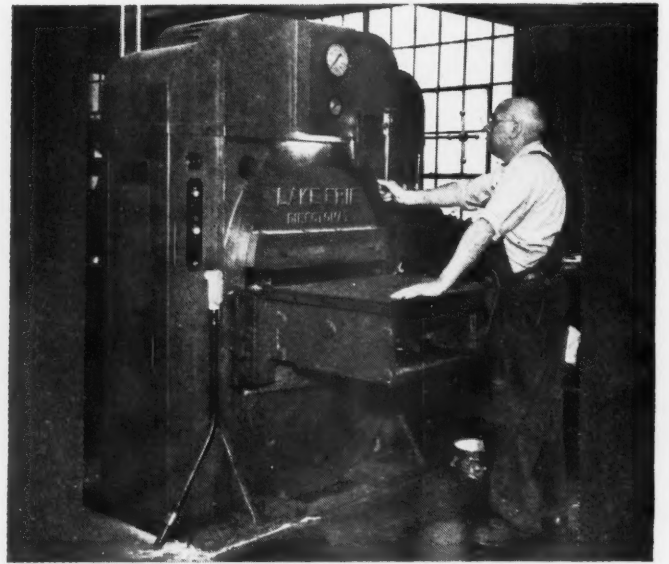
# THE TREND in Mat Molding is to DIRECTOMAT



▶ PLANING A DAILY R.O.P. FORM on a Lake Erie Directomat at the Los Angeles Times.



▶ PLACING MAT ON FORM IN PLANT of The Spokesman Review and Spokane Daily Chronicle.



▶ APPLYING EXACT PRE-SET PRESSURE on a daily page in the plant of the Cleveland Press.



More and more leading dailies are installing Directomat equipment for sharper, faster dry mat molding...and perfect color mat register.

Newspapers using the Directomat report that it makes possible the higher quality reproduction being demanded today by advertisers and agencies. In addition to producing sharper mats with cleaner casts, the Directomat eliminates stretch of mats...reduces chance of mat buckle...and can produce dry mats with the same shrinkage you now get. With the Directomat, all color work and fine half-tone work can be molded

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568 Woodward Ave., Buffalo 17, N. Y.

*Offices in Principal Cities and Foreign Countries*

Leading manufacturer of hydraulic presses—all sizes and types—stereotyping...plastic molding...processing...rubber vulcanizing...metal working...special purpose.

# ACROSS THE COUNTRY, IPI STANDS READY TO SERVE YOU

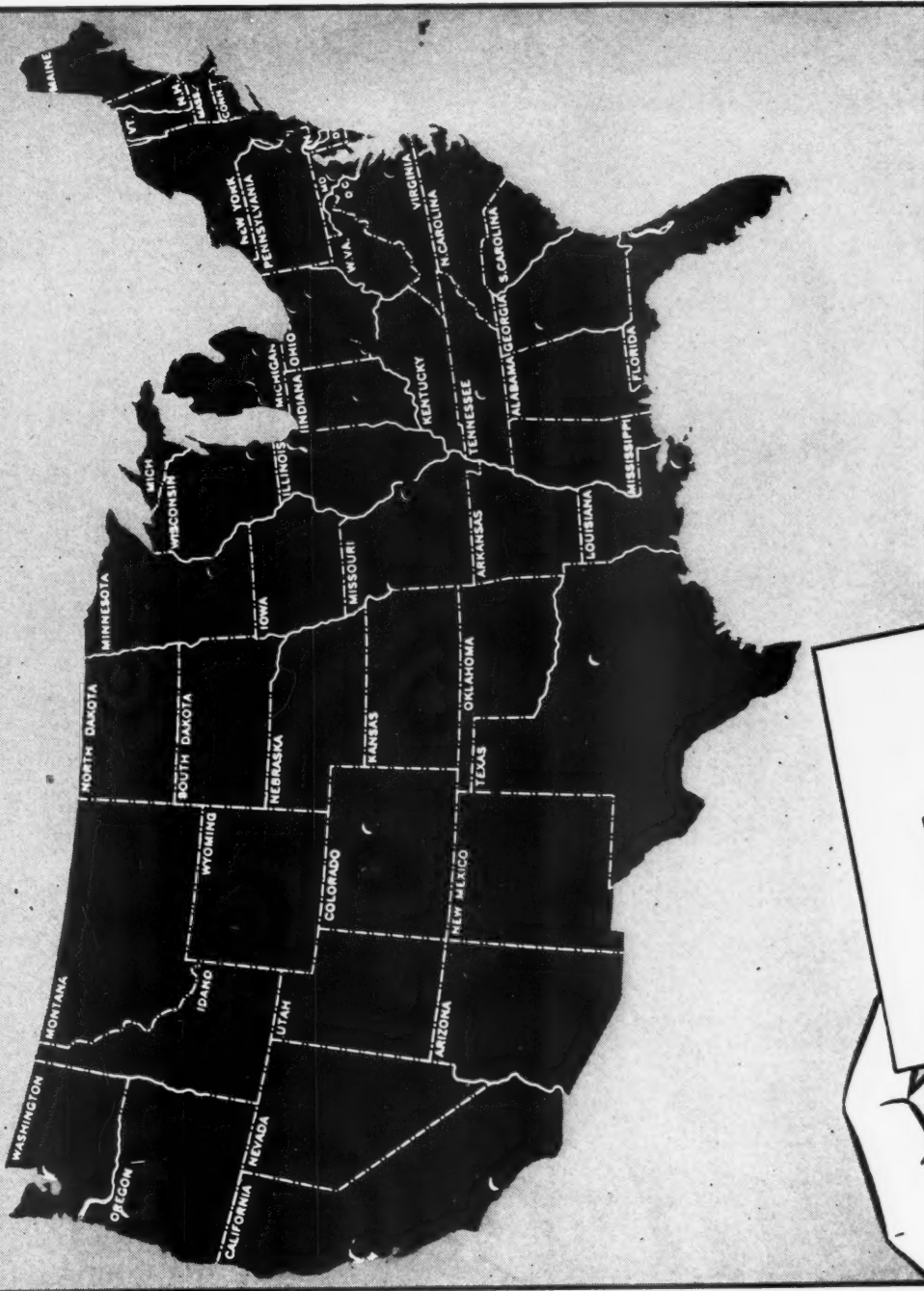
So that you will know where to find us in a hurry, here is a list showing the location, address, and telephone number of IPI's branches and factories.

## ● THESE ARE OUR BRANCHES

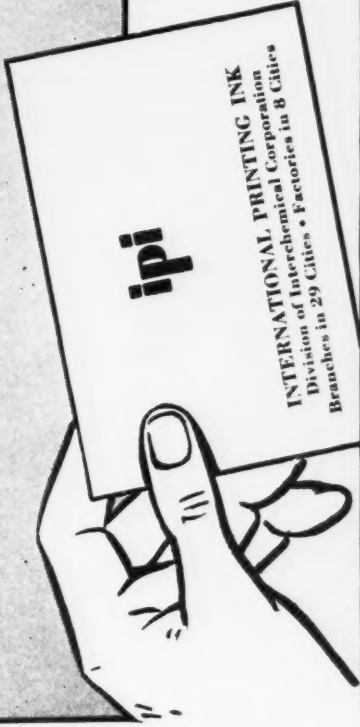
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Metz Park, P. O. Box 199  
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(News Ink)  
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- \*The International Printing Ink Corporation Limited (California)

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TEL. PARKWAY 4700
- \*The International Printing Ink Corporation Limited (California)



The most complete, nation-wide ink and color service is provided by International Printing Ink Division of Interchemical Corporation. Its extensive organization assures you of prompt and reliable service wherever you may be located. For prompt service on ink and colors, call or write the IPI branch nearest to you. Customers say, "It pays to keep in touch with IPI." International Printing Ink Division of Interchemical Corporation, 350 Fifth Avenue, New York 1, N. Y.



A  
POSTWAR  
DEVELOPMENT



INFRA-  
RED HEAT FOR  
ENGRAVING EQUIPMENT

**CALL AND SEE IT—BOOTH 4**

*While Attending A. N. P. A. Mechanical Conference, Pittsburgh*

The New Chemco Burning-In Stove with  
Infra-Red Heat for Both Zinc and Copper  
... Absolute Uniform Burning-In.

**CHEMCO**

**PHOTOPRODUCTS CO.**  
230 W. 41 ST., NEW YORK 18, N. Y.  
27 S. MARKET ST., CHICAGO 6, ILL.  
408 CAMP ST., NEW ORLEANS 12, LA.  
99 CONE STREET, ATLANTA 3, GA.  
18 TREMONT ST., BOSTON 8, MASS.  
Works: Glen Cove, New York



# *Federated* — MODERN HEADQUARTERS FOR NON-FERROUS METALS

**SMELTING**—In the early days, furnaces were like Topsy, "they just grew". In Federated, furnace design is based on sound and tried engineering principles. Besides this, scientific instruments are used to control the operation of the furnace so that human failures can be minimized. Even more important is the metallurgical control and precise refining practice exercised while the metal is being processed. Each step in the process is carefully checked by trained metallurgists so that you may be assured of a top quality product. The aluminum furnace illustrated is typical of the modern smelter. Streamlined and provided with ventilating equipment, it has a capacity of 70,000 pounds each day.

**FEDERATED METALS DIVISION**  
**American Smelting and Refining Company**  
120 Broadway, New York 5, N. Y.  
Nation-wide service with offices in principal cities

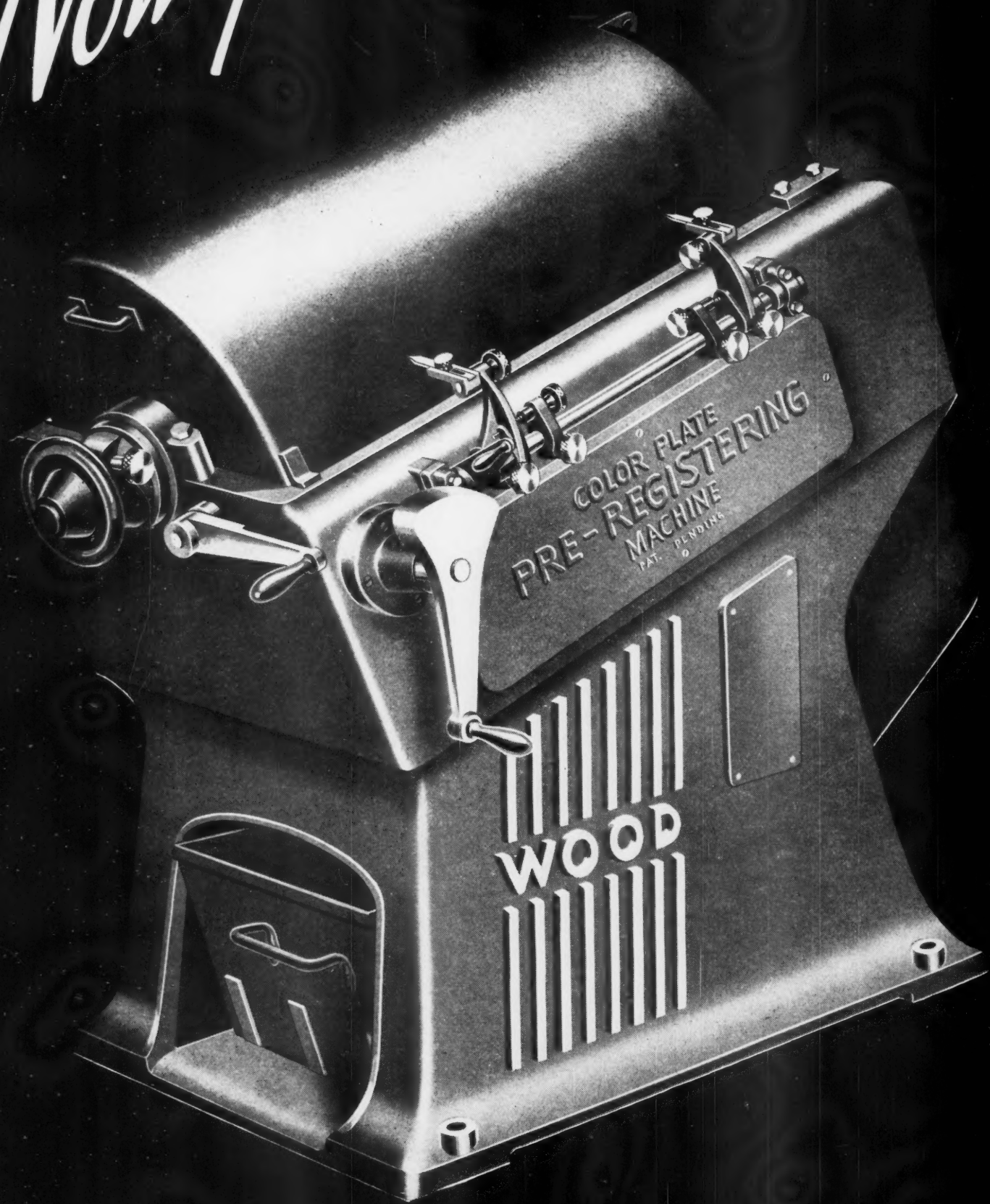
**FMD**  
*Federated*



**ALUMINUM • BRASS • BRONZE • BABBITT • DIE CASTING ALLOYS • SOLDER • TYPE METAL • ZINC DUST**

When writing the advertiser please mention PRINTING EQUIPMENT *Engineer*—July 1946

*Now you can* **PRE-**



**BE**

Pre  
spe  
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spo  
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Tit

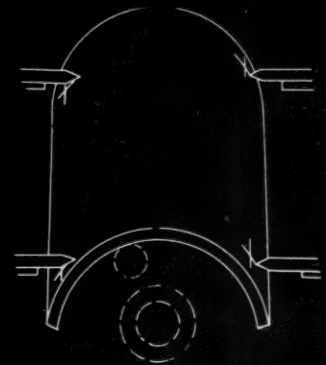
# PRE-REGISTER

## BEFORE they ever reach the press!

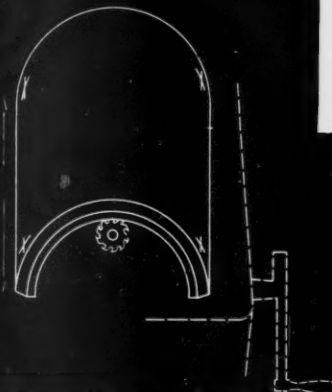
Precise, accurate register of 2, 3, or 4 colors... at high speeds necessary for daily newspaper production... now becomes virtually automatic... with the New Wood Color-Plate PRE-Registering Machine.

This device delivers color plates to the press room... ready to lock up and roll! Skilled pressmen consume no costly press-time in preparation. Any inaccurate plate is spotted in advance—re-cast and registered in a matter of minutes.

For full details, ask our New York Office for the new illustrated brochure.



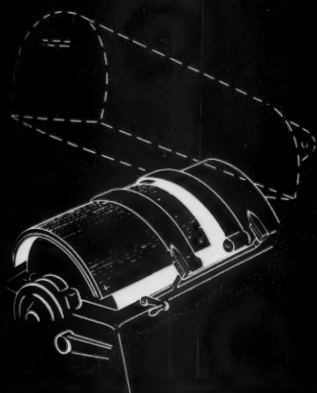
Now simply lock up plates for following colors and throw pointers in position. Adjust position of plate (using adjusting wheels [B] and [C])—so that register marks coincide with previous pointer setting. Repeat trimming operation and color plate is ready for the press—an exact match with the master plate.



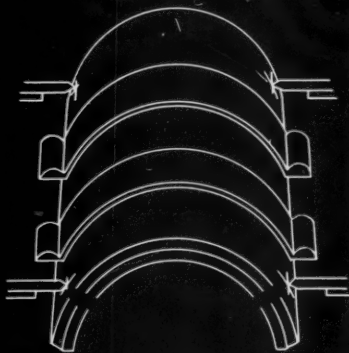
Throw pointers back (all 4 operate in unison) and close hood. Then, as crank rotates plate, saws trim top, bottom and registering side, so they are accurately spaced from REGISTER marks.



5.



Tilt hood, slide plate in and lock.



Center pointers (A) on register marks.

2.

3.

4.





## ***Out on a limb?***

In some cases it might look as if Imperial and the Plus Plan are "out on a limb" when we say, "as soon as the first pound of Imperial Type Metal enters your plant, Imperial assumes unconditional responsibility for that metal's performance". But, 26 years of continued success in keeping type metal in top working shape . . . reducing cross loss . . . lowering yearly metal costs and keeping type metal case histories of thousands of plants, proves that the Plus Plan does the job. That's why we can go "out on a limb" in assuming complete responsibility for your metal.

If yours isn't one of the many Imperialized plants, enroll with the Plus Plan today—relieve yourself of type metal problems. Drop in to see us at Booth Nos. 1 and 2 at the A. N. P. A. Mechanical Conference, Hotel William Penn, Pittsburgh, Pa., August 5-6-7, 1946.

### **IMPERIAL TYPE METAL CO.**

*Serving the Graphic Arts Industry Only*

Philadelphia 34

New York 7

Chicago 50

# **Imperial**



## The \$30,000 Roller

Recently another Ideal customer offered to buy the two test rollers which had been given such a rugged workout in his plant. But while the experimental cost of those two rollers up to that point was close to \$30,000, we still at that time did not consider them good enough

to sell to the graphic arts industry. These and other new rollers are constantly undergoing revision in our research laboratories.

Our idea is to supply the Ideal roller *best suited* for the job to be done.

Be sure that *your* rollers are Ideal!

---

---

### IDEAL ROLLER & MANUFACTURING CO.

2512 West 24th Street  
Chicago 8, Illinois

• *Branches in the principal cities* •

21-24 Thirty-ninth Avenue  
Long Island City 1, N. Y.

# "FOR THE IMPROVEMENT OF THE BREED"

Down the centuries racetracks have been the scene of a most fascinating piece of research: which of a number of horses would run the fastest. Recently, and for the first time in history, a jockey park served as the proving ground for a better breed of a quick setting ink.

A publisher of programs and dope sheets printed at the tracks wanted to cut the time it was taking to get his info from the press to the customers. This called for a quicker setting ink, so he put the problem up to us. Result—SPEED KING BLACKS, for job and cylinder work on coated and uncoated stocks with not too hard a finish.

Johnson SPEED KING BLACKS meet your need, too, for an ink that sets quickly, that can be backed up immediately yet not dry out on the press during the day's run. Furthermore, SPEED KING BLACKS assure high quality printing as well as saving time, for they produce clear, sharp halftones and solids with excellent finish.

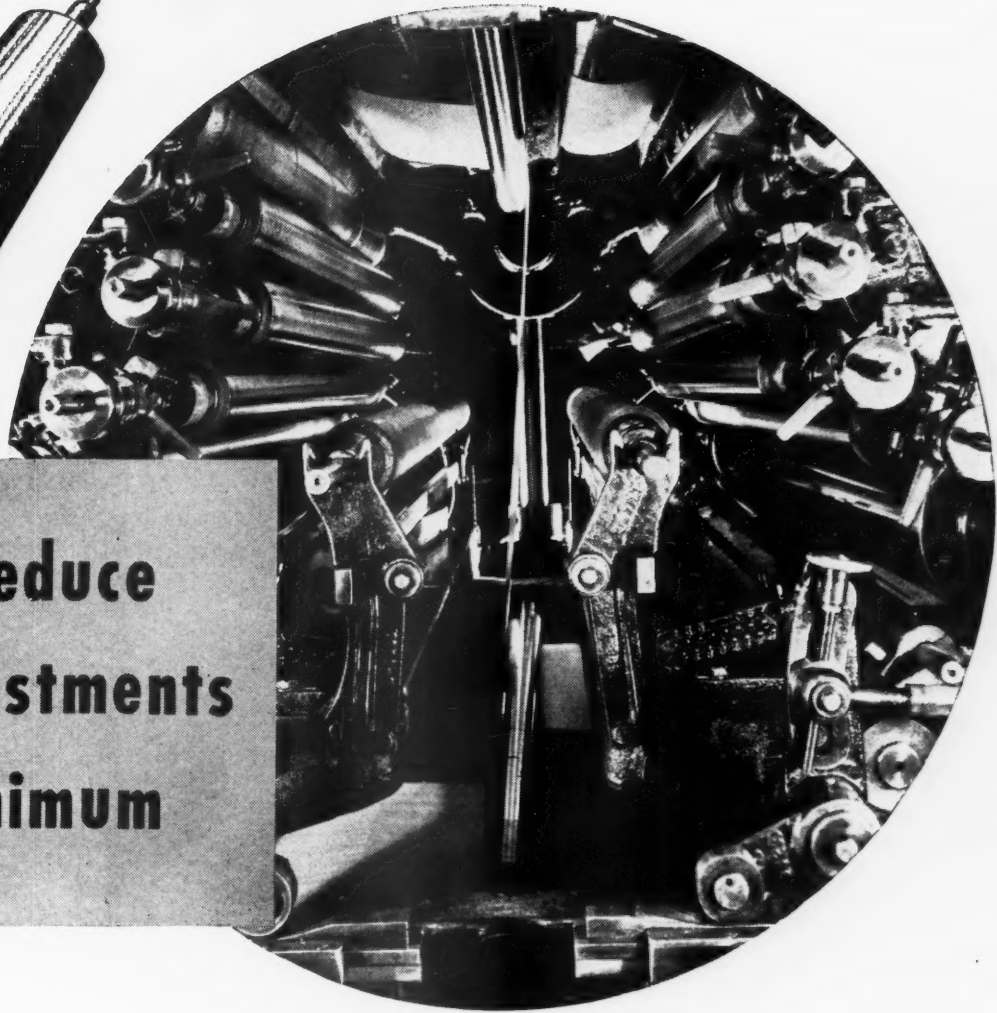
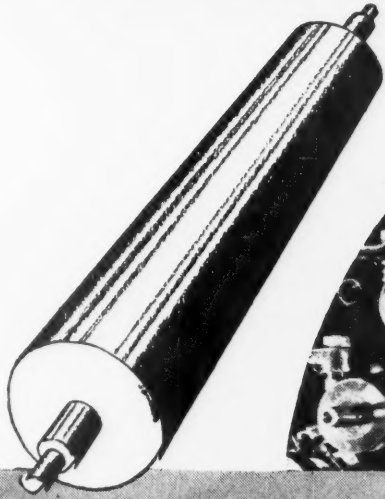
We have prepared a special folder giving complete information on SPEED KING BLACKS. Send for your free copy now.

**CHARLES**  
**FNEU Johnson**  
**AND COMPANY**  
**GOOD INKS SINCE 1804**

**10th and Lombard Streets, Philadelphia, Pa.**

**New York • Chicago • Boston • St. Louis • Cleveland • Detroit  
Baltimore • Kansas City • Pittsburgh • Atlanta • Dallas**

# *use* **DAYCOS**



**... and reduce  
roller adjustments  
to a minimum**

Your presses will require fewer adjustments, once they start to roll, when they are equipped with Dayco Rollers built to your own specifications. That means valuable time saved! And because Dayco newspaper rollers are built to just the exact degree of softness you require, you get the same high-quality printing results, run after run.

Dayco newspaper rollers are built by craftsmen who have built hundreds of thousands of natural and synthetic printing rollers since 1919. These men know how to build rollers that perform the way you want them to . . . know how

to build rollers that give years of trouble-free service with a minimum of regrinding.

Let Daycos prove themselves on your own presses. Then you, too, will know why they are used by hundreds of newspapers the world over for color as well as black and white. Write today for complete information.

**THE DAYTON RUBBER MANUFACTURING CO.  
DAYTON 1, OHIO**

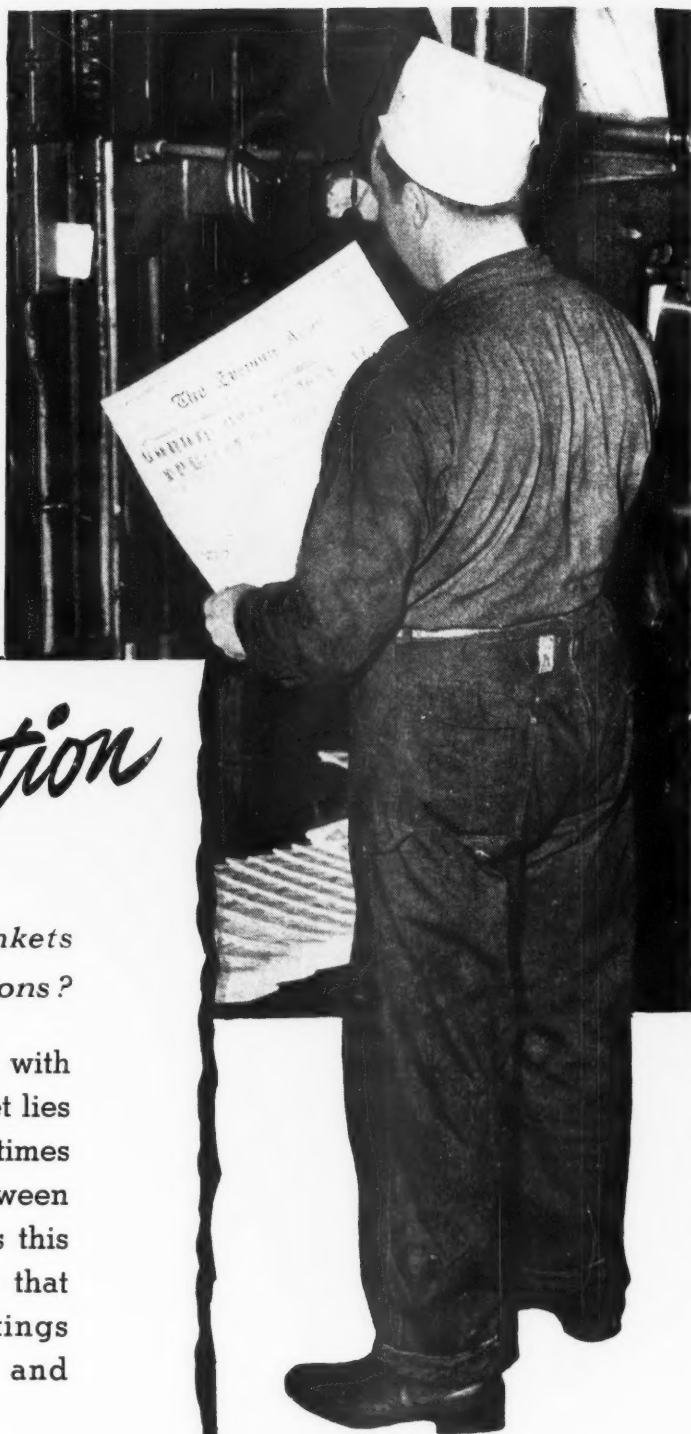
**Latin American Representative:** National Paper and Type Company, 120 Wall Street, New York, N. Y.

**Canadian Representatives:** Manton Brothers, Ltd., Toronto—Winnipeg—Montreal—Vancouver.

# **Dayton Rubber**

THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER

# ASK ANY PRESSMAN



## *This Question*

*Do "Korker" printing press blankets actually give better reproductions?*

● Pressmen who have worked with "Korker" will say "yes". The secret lies in its "controlled resiliency". Many times more air cells are "locked in" between the layers of improved fabric. It is this scientifically controlled resiliency that helps maintain impression settings longer, prints solids stronger, and screens with less plate wear.

Talk to your pressmen about "Korker" today. And then ask your Tingue, Brown representative for a "Korker" demonstration on his next visit.

**TINGUE  
BROWN**  
AND COMPANY

114-120 EAST 23rd STREET, NEW YORK 10, N. Y.  
1227 WABASH AVENUE, CHICAGO 5, ILLINOIS  
723 E. WASHINGTON BLVD., LOS ANGELES 21, CAL.  
507 PETERS STREET, S. W., ATLANTA, GEORGIA  
CANADIAN SALES AGENTS  
**ROSS WHITEHEAD & CO., LTD.**  
MONTREAL, CANADA



## ***Let's see what this huddle is all-about***



● Oh yes—the tall chap is the one who told the conference how his paper got out such big editions in an under equipped plant . . . It seems a lot of people want to ask him questions . . . What is the short chap asking? He says, "I want to know this one thing—what mat are you using?" . . . "I was coming to that," answers the tall one. "We tried several and went back to Certifieds. They were quicker to mold and scorch and their good first casts save a lot of time, compared with having to throw back."

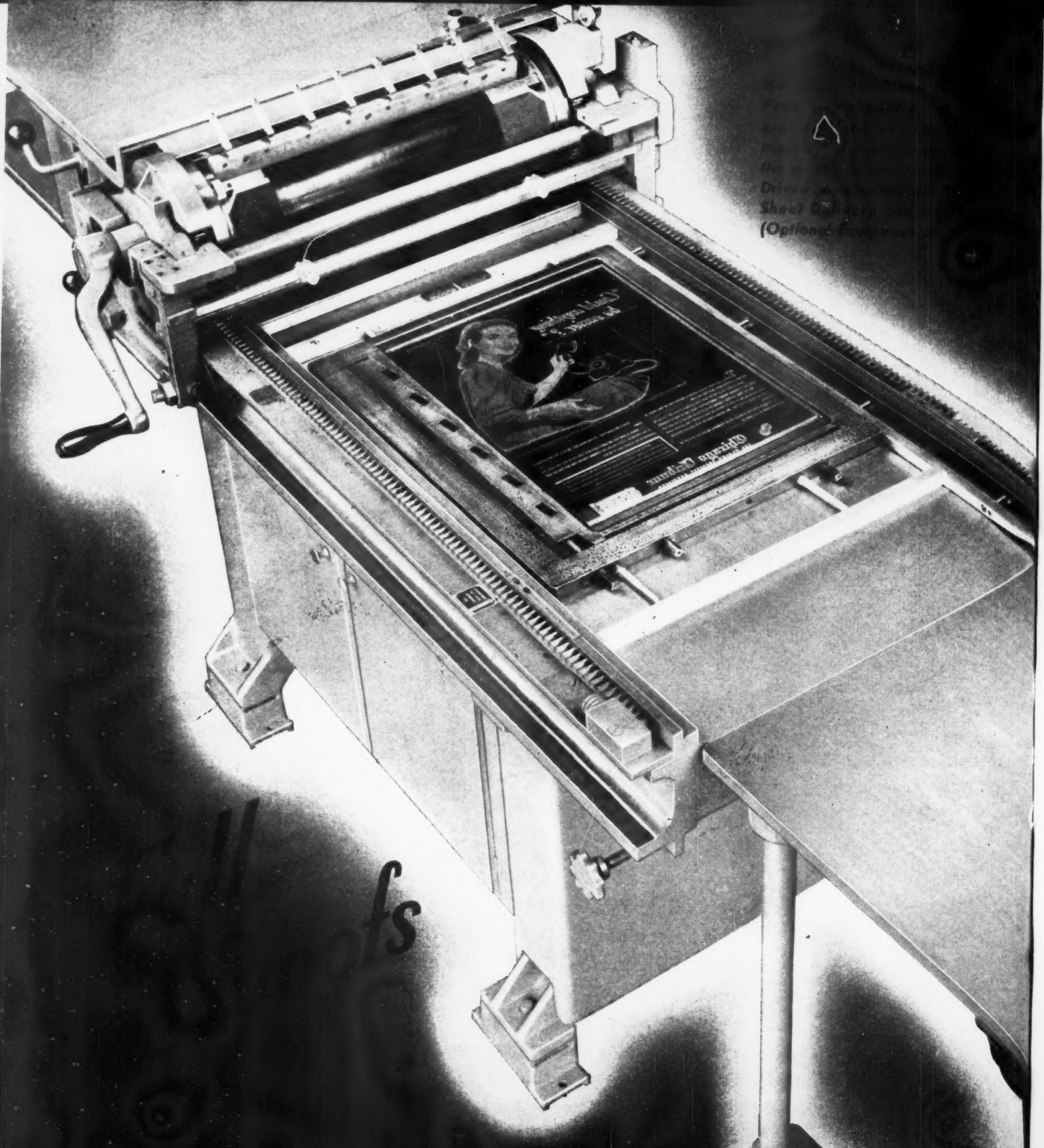
### **CERTIFIED DRY MAT CORPORATION**

9 ROCKEFELLER PLAZA, DEPT. M

NEW YORK 20, N. Y.

*Certified*  
**DRY MATS**

*For dependable stereotyping,  
rely on Certified Mats*



Drive  
Sheet  
(Optional)

**VANDERCOOK**  
PREMAKEREADY EQUIPMENT



**IT'S THE FINAL  
TOUCH  
THAT COUNTS**

## ... and VULCAN PRESS BLANKETS give you the final touch of perfection in presswork

VULCAN PRESS BLANKETS afford new and unsurpassed developments in impression cylinder packing . . . give you these advantages with ease:

Uniformity of gauge—precision thickness.

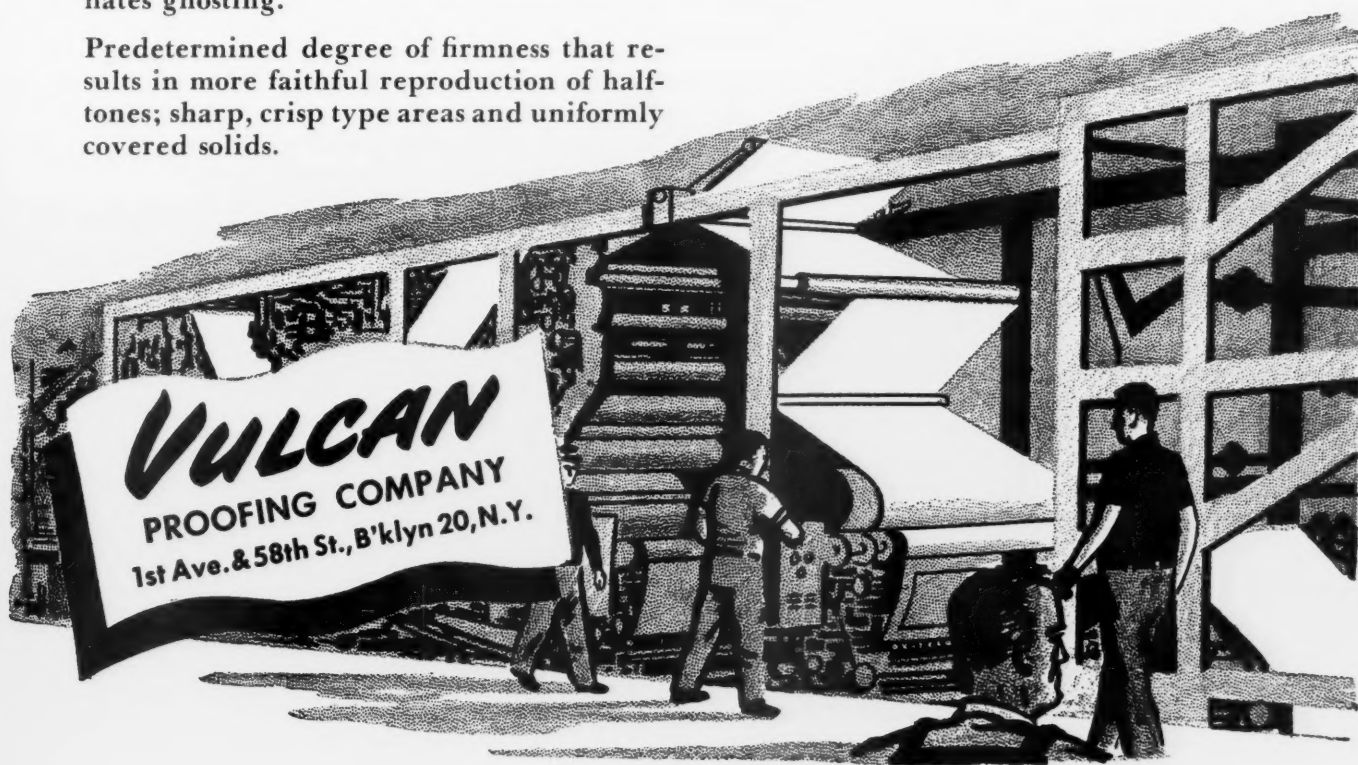
Perfect degree of desired resilience. No receding from original thickness. No bolstering. No overpacking required.

An oil-proof surface that completely eliminates ghosting.

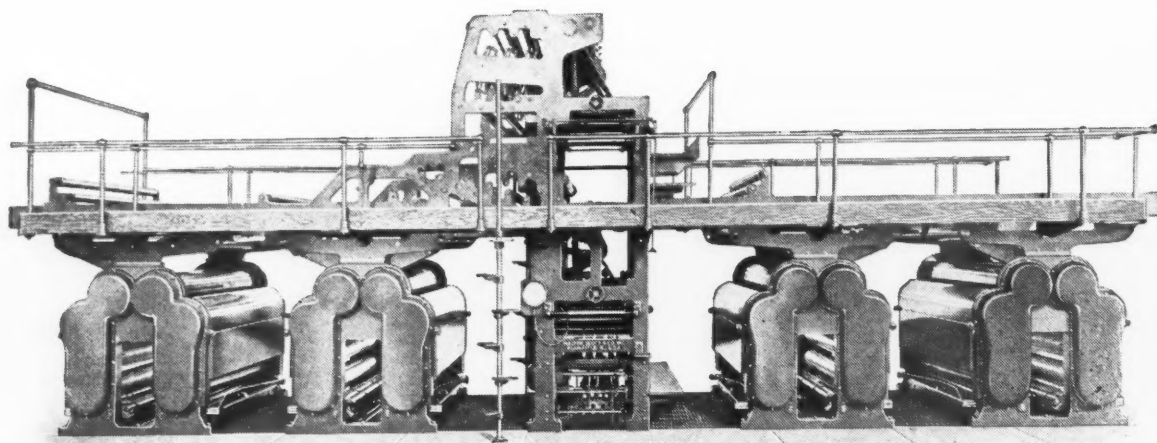
Predetermined degree of firmness that results in more faithful reproduction of half-tones; sharp, crisp type areas and uniformly covered solids.

VULCAN manufacturing facilities and capacity have been greatly expanded. Vulcan research continues to offer new advancements and refinements in materials and methods.

There's a Vulcan blanket or combination to meet your most exacting requirements. Insist on VULCAN blankets for better presswork—with ease.



## The Scott Extra-High-Speed Newspaper Press



Safeguard your investment by making certain the press you buy embodies thoroughly modern, tested and proven ideas, design, construction and materials.

The New Scott Press, thoroughly tested and proven by actual continued use, incorporates these modern ideas, design, construction and materials:

Built for the narrower web widths, with the largest practical roller bearings, it is most rigid, uniform in impression and inking at all speeds.

Modern true-running hard high-grade alloy steel gears are many times stronger than their maximum load, and run extremely quiet.

Modern High Speed shafts in precision ball bearings and modern sealed oil enclosures insure ample power and durability.

Ink feed and Vibration drive directly from main shaft eliminating pulsations from Printing Cylinder drive.

Clean design and modern ideas save valuable pressroom space, combined with complete accessibility and convenience.

Scott 3 to 2 ratio Folders with simplified modern main drives give unmatched performance on all kinds and sizes of products.

Maximum speed and net production assured with safety and efficiency.

Designed for black and color printing.

*Let us tell you all about the New Scott Press*

**WALTER SCOTT & CO., INC.**  
Plainfield, N. J.

# For Every Load, Speed and Duty



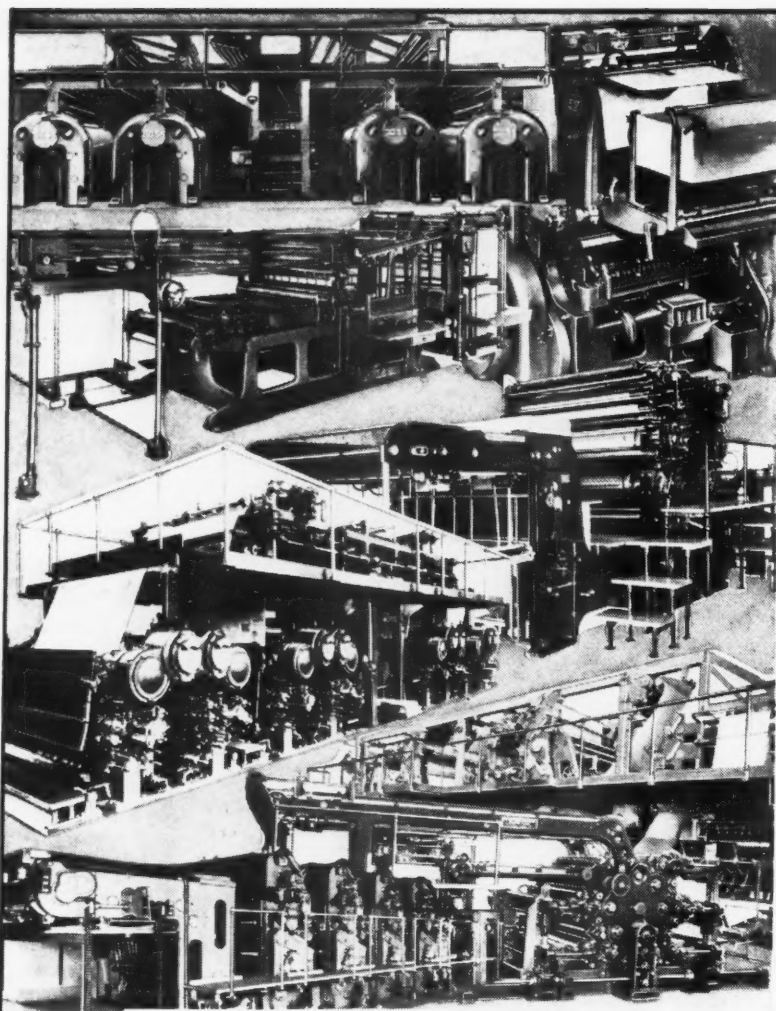
**NORMA-HOFFMANN**

**Precision Bearings**

BALL, ROLLER, THRUST—3000 SIZES

NORMA-HOFFMANN BEARINGS CORPORATION, STAMFORD, CONNECTICUT

When writing the advertiser please mention PRINTING EQUIPMENT Engineer—July 1946



# a full time job



*This is The Age Of The Specialist—*  
Keeping ahead of the demands of the consumer of Printing Ink is a full time job.

All of our time, skill and research is devoted to producing better and still better inks for the Printing Trades.

**Howard Flint Ink Company**  
*Printing and Lithographic Inks*

DETROIT CHICAGO HOUSTON DENVER ATLANTA  
NEW ORLEANS CLEVELAND INDIANAPOLIS LOS ANGELES

# 2 products to save ..

**TIME**

**TROUBLE**

**TEMPERS ..**

*in Composing Rooms*



## **BOOTH'S ZINK CUT CEMENT**

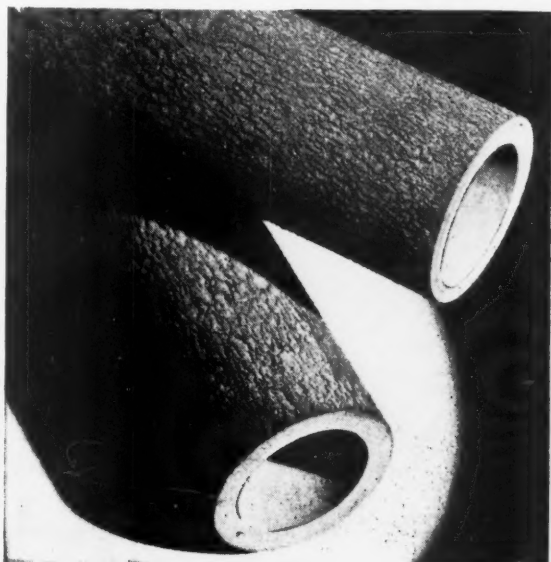
Use BOOTH'S ZINK CUT CEMENT to fasten any kind of cut, electro, stereo, or plastic, to wood or metal base. Apply it as directed, you'll find it fastens the cut firmly.

Lost, misplaced, or out-of-position cuts can cause no end of trouble. This easy to use product will spare you those worries.

BOOTH'S ZINK CUT CEMENT is economical too, a little goes a long, long way. Get a supply of this low cost "trouble insurance" now.

**PRICES:** In the United States: 75c per tube; \$6.00 a dozen tubes; \$5.00 a dozen in gross lots.

## **BOOTH'S BLACK RUBBER ROLLS**



Long wearing and efficient, BOOTH'S BLACK RUBBER ROLLS save time and trouble too. Maximum resiliency affords greatest friction for cam tread. These rolls maintain an even diameter throughout their length when installed correctly. Have these trouble savers always on hand. Get a supply.

**PRICES:** \$1.45 per pair; \$7.75 per dozen.

# **E. A. BOOTH RUBBER COMPANY**

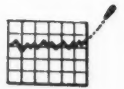
**MAHONING BANK BLDG.**

**YOUNGSTOWN, OHIO**

# WHEN

# THEN

PLANS CALL FOR MORE STEREO CAPACITY



MONTHLY FUEL BILLS LOOK TOO BIG



YOU ARE LOSING TOO MANY CASTS



## switch to modern practical KEMP immersion-gas-firing

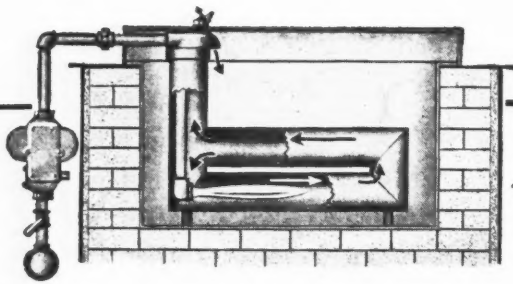
Whether you need more capacity or just want to improve present practice, a switch to KEMP stereo melting is profitable — because a KEMP immersion-fired pot quickly *saves enough to pay for itself*—then saves for you.

Here's why. First, a slash of 40% in fuel costs has been average experience in over 200 cases. Second, KEMP firing sharply reduces dross loss. Third, temperature control is so precise you enjoy sharper, surer casting results, which cut time, labor and rejects.

KEMP firing puts the heat to work *inside* the pot, not under it. Result: maximum heat transfer with minimum fuel expense and remarkable speed. Even the "waste" exhaust gases are used—they blanket the metal, reducing oxidation and preventing heat losses.

And the exclusive KEMP industrial carburetor comes with the job—to squeeze every pennyworth of heat from your gas supply.

There's a coupon in the corner.



### HEAT THE METAL—NOT THE POT

Combustion is within tubular loops totally immersed in the metal. Recirculation of hot combustion gases around each loop (driven by the force of the burner flame) promotes efficiency and uniformity of temperature over the loop surface. When the hot gases do exhaust, they vent down over the molten metal surface, reducing heat losses from the system, and minimizing dross. Stereotype metal capacities from 2 to 12 tons—production rates from 20 to 480 plates per hour per pot—round, square and elongated shapes.

# KEMP OF BALTIMORE

PRECISION CARBURETION + ADAPTED COMBUSTION  
FOR INDUSTRY'S HEAT-USING PROCESSES  
ATMOSPHERE GENERATION & ADSORPTIVE DRYER SYSTEMS  
FOR PROCESS CONTROL AND PROTECTION

JMLcoK-F1po

THE C. M. KEMP MFG. CO.  
405 E. Oliver Street, Baltimore 2, Md.

Send me your new 2-color 12-page booklet on stereo melting, along with its Specification Sheets.....

NAME \_\_\_\_\_

TITLE \_\_\_\_\_

COMPANY \_\_\_\_\_

PLACE \_\_\_\_\_



# 136 Paper Executives . . . Helped Elwell-Parker to Build this Book



*"Industrial LOGISTICS in Paper"* shows modern ways to reduce load-handling costs in Warehouse—Pressroom—Bindery. Coupon reserves your copy.

The Book that leading Paper Executives requested, and helped Elwell-Parker to compile and prepare, is in its final stages and will be issued soon.

Only Elwell-Parker *could* produce "Industrial Logistics in Paper"—based upon years of fundamental experience engineering, designing, building and supplying Storage-Battery Trucks and Cranes to the Paper Industry worldwide.

Size 8½" x 11", 48 pages and cover, "Industrial Logistics in Paper" contains approximately 100 pictures demonstrating cost-reductions by Elwell-Parkers in transporting and handling Print Stock throughout Warehousing and Distribution, Printing and Publishing, Converting and

delivery to customers. Many pictures were made exclusively for this Book and appear for the first time.

Logistics won the War by getting vast amounts of materials to key points, on time. *Industrial Logistics*—by Elwell-Parker—applies the same vital principles by the transport of peacetime loads by the Paper Industry, and scores a complete win over waste.

Please use the Coupon to reserve your copy of "Industrial Logistics in Paper" and to bring your nearby Elwell-Parker Paper-Handling Consultant with valuable information about reducing *your* load-handling costs. The Elwell-Parker Electric Company, 4517 St. Clair Avenue, Cleveland 14, Ohio.



Dial The  Man Today!

Albany.....2-4095	Ft. Worth.....4-6184	Philadelphia.....RIT 7246
Birmingham.....3-3323	Greenville.....534	Pittsburgh.....AT 6734
Boston.....COM 5522	Indianapolis.....LI 3131	Richmond.....27977
Buffalo.....GR 7664	Jacksonville.....5-1384	St. Louis.....LA 4545
Charlotte.....5026	Kansas City.....VA 7021	San Antonio.....TR 3653
Chicago.....SUP 7420	Los Angeles.....PR 5911	San Francisco.....GA 1827
Cincinnati.....MA 0650	Memphis.....8-1648	Seattle.....EL 5722
Cleveland.....MA 8915	Milwaukee.....MA 7817	Stratford, Conn.....BR7-1554
Columbus.....AD 4824	Minneapolis.....GE 3247	Syracuse.....2-9596
Denver.....KE 5500	Montreal.....HA 7191	Toronto.....WA 1478
Detroit.....MA 2233	New York.....COR 7-0797	Vancouver.....MA 2571
	New Orleans.....MA 6316-C	York, Pa.....4-5430

## ELWELL-PARKER

### POWER INDUSTRIAL TRUCKS

Established 1893

Elwell-Parker, Cleveland:—

Please have your Representative call.

Please send "Industrial Logistics in Paper" as soon as available, addressed personally to:—

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

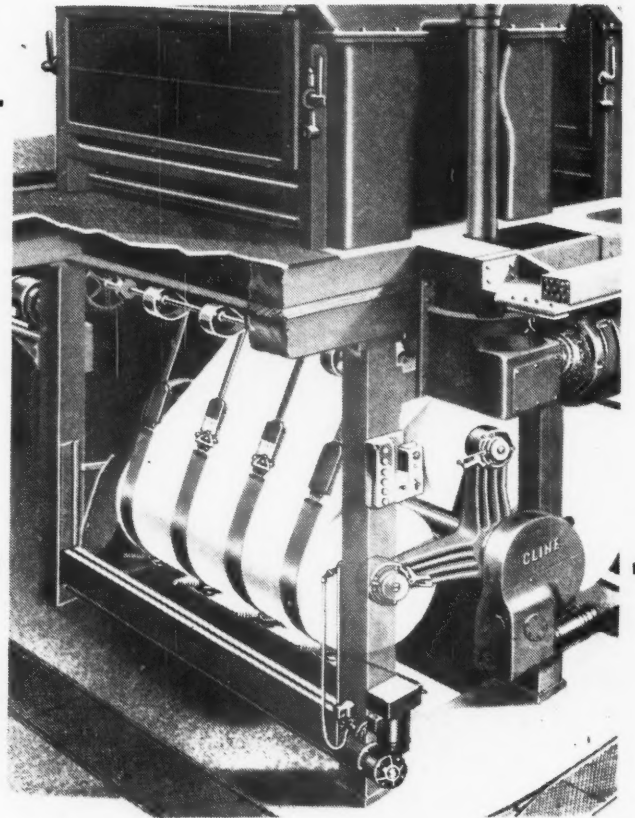
City \_\_\_\_\_ State \_\_\_\_\_

PE/E 746

# CLINE

## YOU GET THESE ADVANTAGES WITH AUTOMATIC TENSION AND FULL SPEED PASTER

Actual operation records from some of the best equipped newspaper and magazine publishing plants in the world testify to the efficiency and economy of the Cline Automatic Tension and Full Speed Paster. This modern equipment has many advantages, a few of which are listed below.



- Press one button to complete the paster and tail cutoff.
- Constant tension maintained during paster cycle.
- Simple stationary tension straps . . . no running belts.
- Tension may be set from pressroom level.
- No running belts in the operator's way when preparing the roll or leading webs thru.
- Simple to maintain — simple to operate. There's no need to measure the rolls before

a paster is made, nor to move mechanical devices to prepare for making the paster.

- Increase production. Continuous full speed operation means increased production. With this equipment rolls of paper feeding into rotary presses are changed without changing press speed.

These are the reasons why a listing of Cline System users reads like a "blue book" of the newspaper and magazine publishing fields. Publishers planning

for improved efficiency, lower operating costs and higher quality depend more and more on the Cline System as the proven method for fulfilling these plans.

## CLINE ELECTRIC MANUFACTURING CO.

Main Office: 211 W. Wacker Drive, Chicago 6, Illinois

Western Office  
Crocker First Natl. Bank Bldg.  
San Francisco 4, Calif.



Eastern Office  
220 East 42nd Street  
New York 17, N. Y.

# exclusively GOSS

Goss engineers have never felt that mere production of presses over a long period of years was a guarantee of their operating efficiency. Real service to an industry demands continuous progress toward an ideal. That has always been our aim and has resulted in many features that are now exclusively GOSS.

## THE GOSS CONTINUOUS FEED INK SYSTEM

Supplies a continuous, even flow of ink regardless of press speed.

## THE GOSS COLORTROL

Central Station control of ink supply for any column at convenient waist-high level.

## THE GOSS TENSION PLATE LOCK-UP

Printing plates locked on cylinders in tension cannot come off and result in higher quality printing at any speed.

## PRELOADED BEARINGS

Result in elimination of end play which is responsible for stagger marks and cylinder and form roller vibration.

\* The exclusive features shown and many other refinements in design and construction are embodied in the very latest GOSS Newspaper Press—

### THE Headliner

If you are considering a new press with complete flexibility for color printing—now or in the future—you will want the data on this modern press.

For the Medium Size Daily, Goss has developed the New Improved Unitube Press.

## THE GOSS UNI-FLOW FOLDER

The only folder with folding mechanism fully enclosed and operating in oil and delivering papers folded edge forward.

# GOSS

NEW YORK    SAN FRANCISCO    LONDON, ENGLAND



**Rely on  
MERCURY  
PRODUCTS  
for finest  
results**

**...that bird said  
a mouthful!**

GREETINGS TO ALL ATTENDING  
THE AMERICAN NEWSPAPER PUBLISHERS  
CONVENTION



Yes, sir—Mercury fans are wise birds. They know that the "complexion" of a Mercury Roller or Blanket is smooth and flawless as a baby's, yet tough as alligator hide. They know that Mercurys will not swell or lose their shape. They know the diameter of these rollers never varies. Above all, they know that the Mercury name on any product is "quality insurance". *See for yourself!*  
MADE FOR ALL GRAPHIC ARTS PROCESSES

**RAPID ROLLER CO.**

Federal at 26th  
Chicago, Illinois

D. M. Rapport  
President

# "EASTERN" FOR QUALITY NEWSPAPER SUPPLIES

## "FLECTO" GUMMED BACKING FELT



"FLECTO" Gummed Backing Felt is packed in individual containers of 5 sheets each, for convenience in handling.

It is soft and pliable, assuring conformity to the mat and easy shrinking with the mat. Hundreds of users say "THERE IS NO BETTER BACKING FELT MADE."

### SPECIFICATIONS

**ADHESIVES**—The special adhesive applied to "Flecto" is scientifically formulated to hold fast on all types of dry mats. Climatic conditions will not affect it.

**FELT**—This felt is produced under rigid control so that it is uniformly soft and porous, to permit the quick and easy escape of steam.

"FLECTO" gummed backing felt is a product of modern chemical research. It is of finest quality, both in the felt and adhesive, and is sold on a money-back guarantee.

Here are "FLECTO" facts!

It will stick fast, on any mat, regardless of heat used in scorching. Its adhesive will not crack, peel, slip or crystallize.

It tears easily and cleanly, without ragged ends.

Its gauge is uniform throughout and all "Flecto" is gauged accurately.

"FLECTO" felt is well bonded throughout and will not peel or separate in layers.

### GAUGES AND SIZES

Gauges .021, .025, .030 (Green) sheeted 18" x 24".

Gauge .035 (Red) sheeted 18" x 24".

Gauges .040, .045 (Green) sheeted 18" x 22".

Gauges .050, .060 (Gray) sheeted 18" x 20".

Cut into strips 9" or 18" long and 1/8" to 1" wide at no extra charge.

## NEW CORK MOLDING BLANKETS AVAILABLE

The NEW Eastern TRU-MOLD Cork Molding Blanket is now available. This TRU-MOLD Cork Molding Blanket differs from all other blankets now on the market.

Greater shrinkage has increased the need for sharper impressions—so the correct percentage of Bakelite has been incorporated in the cork composition binder to insure perfect density. The blanket has flexibility to reduce cracking on the edges to a minimum. We believe this new molding blanket to be an advanced step towards improved printing.

These blankets may be ordered in "Medium," "Medium-Hard" and "Hard" density.

Sizes	1/4" Each	5/16" Each	3/8" Each	3/16" Each
20" x 24".....	\$2.50	\$3.75	\$4.50	.....
21" x 25".....	2.75	4.00	4.75	\$2.50
22" x 26".....	3.00	4.25	5.00	.....

(One size only on 1/16"—21" x 25")



## DEEPMOLD CREEPER

This is a new creeper designed to eliminate the faults found in many types of creepers. The Deepmold creeper is composed of Neoprene and Cork. The stretch has been eliminated. Will outlast the standard cork and rubber creeper.



## PLATE-TAK

Once again this super-thin cut mounting tape is available. It is the thinnest made, — being approximately .003" thick.

## LINOTYPERS CHAIR

Designed especially for that tedious job, and acclaimed by hundreds of Linotype Operators to be the "most comfortable chair" for that purpose. Base is built of cold-rolled steel and is braced to withstand the extra strain caused by the operator's continuous movements.

**SPECIFICATIONS:** 14" high at the seat, adjustable up to 17" in 1/2" steps. Seat is posture style 4 1/2" 5 ply birch, 16 1/4" wide, 14" deep. Steel ball and socket swivel feet. 1 1/2" diameter of the foot remains flat on the floor.

We have a complete line of composing room equipment, supplies and linotype parts.

## SUPERIOR TAILBOARDS

.054 and .030 gauges, for Flat and Curved Casting.

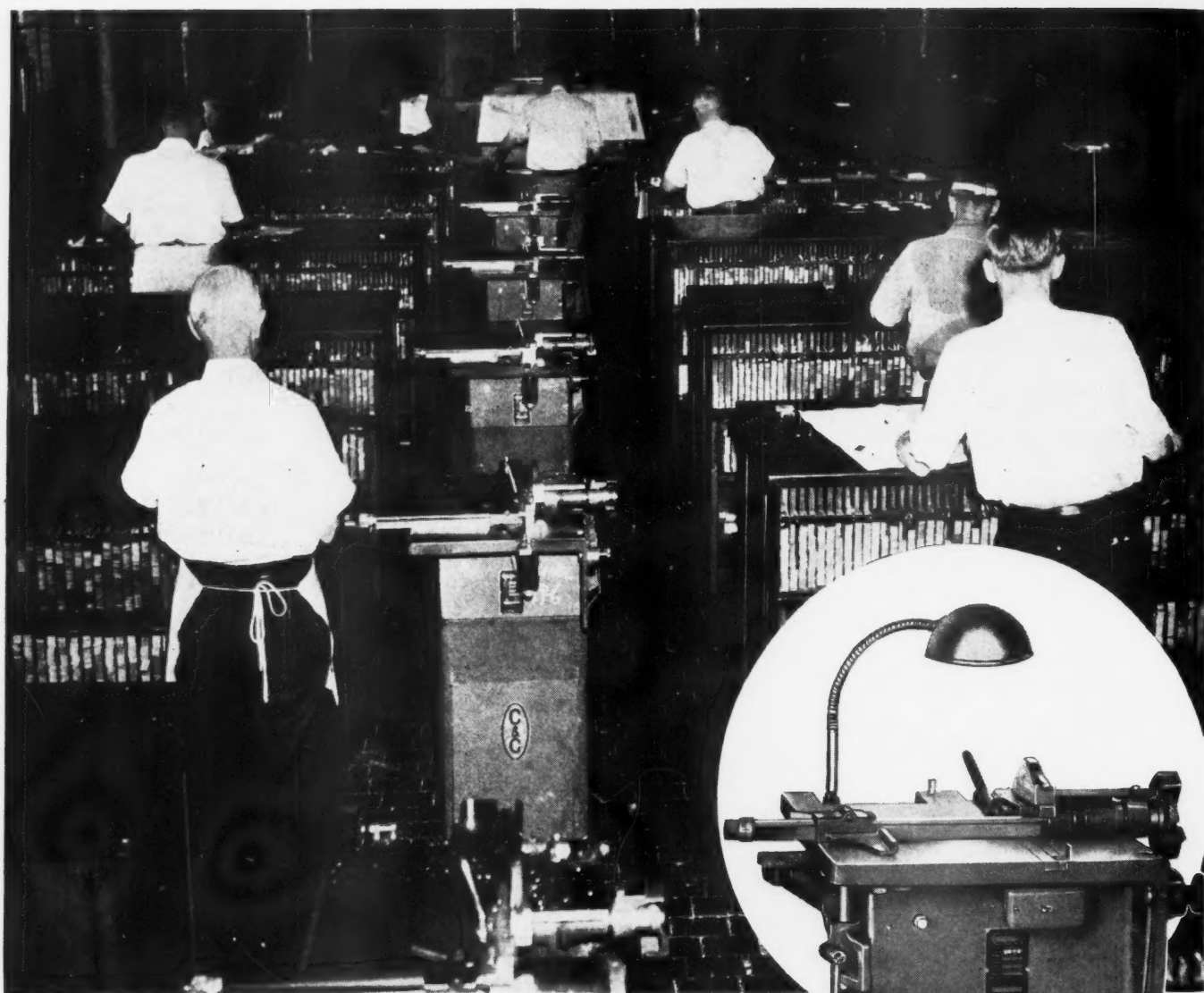
Flat Casting Board — .025 gauge.

Autoplate Belts  
Router Bits  
Router Belts  
Circular Saws  
Jig Saw Blades

Cut Mounting Tacks  
Hand Mitts  
Molding Boards  
Direct Pressure Felts  
Wool Dryers

Direct Pressure  
Molletons  
Mallets  
Planer Blocks  
Woven Wool Molding  
Felts

**Eastern Newspaper Supply**  
9603 Northern Boulevard  
Corona, New York



**THIS C&G 3-A SAW TRIMMER BELONGS  
BESIDE EVERY COMPOSITOR'S TABLE...**

***AN AMAZING TIME AND LABOR SAVER!***

COMPOSING ROOM foremen and practical compositors rely upon the speed, accuracy, and safety of the C&G 3-A SAW TRIMMER.

Always on the job, seldom requiring servicing, the C&G 3-A SAW TRIMMER is equipped with a special Clamping Arrangement that virtually eliminates the fanning or jumping of slugs while being sawed.

For greater shop efficiency, equip with these fast, sturdy, dependable C&G 3-A SAW TRIMMERS that assure years of time-saving, trouble-free service. Write for detailed specifications and prices.



**MILWAUKEE SAW TRIMMER CORP.**

**610 E. CLYBOURN STREET**

**MILWAUKEE 2, WISCONSIN**

NEW-ENGLAND.  
THE  
Boston Gazette.  
Published by Authority.  
From MONDAY December 28. to MONDAY January 4. 1719.



THE Approbation this Paper has already met with from the Letter Bearer of the Town, & from the  
suitable Acknowledgment from this Office, with repeated Assurances, that it shall be carried on  
in such a manner as to render it both beneficial and entertaining.

And whereas some few Merchants have made their Objections against the Possibility of  
an exact Price Current (in the manner proposed in the first and second of these Papers  
of the different Prices given for the same Commodities. This Part therefore is partly  
to those of this Town, desiring their unbiased Opinions, Whether the continuing  
Current in the Market already mentioned, will not be a means of promoting  
of this Place for the contrary? And it is hereby promised, That an entire Neglect  
of the chief Design of this Undertaking to endeavour to advance, but not prevent

**S**ir George Byng received some days ago a Letter  
from Capt. Matthews, Commander of his  
Britannick Majesty's Ship the Kent, dated off  
Palermo the 21<sup>st</sup> per N. S. which shews that  
on the 19<sup>th</sup> about Eleven at Night Captain  
Scott fell in with a Sloop; it proving little  
but the Boat after her, which came up with  
said Sloop. The latter kill'd five of the Sloop's  
wounded Capt. Scott's Cooks, and sent others to  
be fired, and encouraged his Men on Board, with which  
poised in a Valley of small Arms, with which the  
said Sloop was not dead. They took possession of the  
Vessel: In her was a Colonel, Aldé Camp, and  
Marquis de Lede, who had under his Care Prisons  
throw them into the Sea before the Sloop was boarded.  
He said he had Barcelona on the 21<sup>st</sup> of August. The  
imperial Troops being embarked the 28<sup>th</sup> per Sir  
George Byng sail at midnight, and the next morning  
was in sight of Cordus; Towards Noon the Wind  
was contrary, so that he was ten of this Point  
Afternoon; but as the Wind was last all the  
Voyage.

**SEMPER PARATI**

**M**onsieur, Oct. 6. His Majesty's  
Africa of the Violence and  
have been committed and  
two Subjects of the Church  
by the taking away of the  
ent part of the Church  
Wolffersheim 212  
giving them of the Church  
Church of the Holy Ghost  
Revenues themselves annexed, which not only obliges  
said Prelates to perform Divine Service in the open  
Fields, but also to perform them in the means of main-  
taining their Subjects; and even the Religion of the  
said Prelates, has been forbidden under severe Pen-  
alties in all the Countries of the Kingdom of the  
Spain have been made to his Majesty, by the King of  
Catal. to employ his Offices effectually to procure  
Subjuncts to the said Protestant Subjects of the said

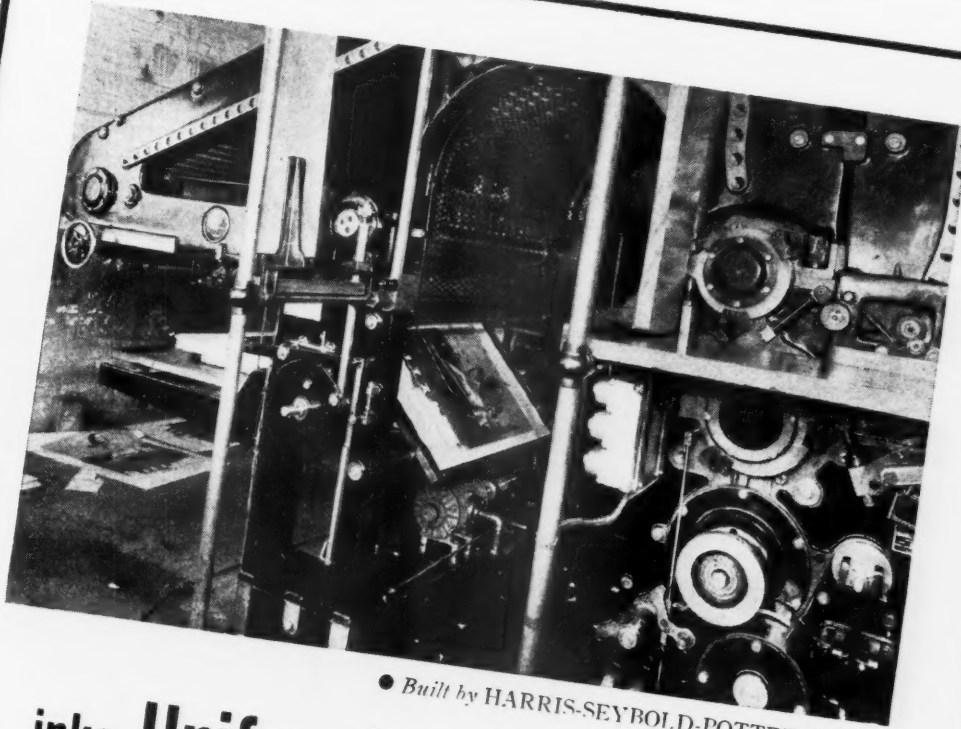


# Published by Authority

Over two centuries ago in 'early America' a publisher could not exist without the approbation of the authorities. Prominent in the name plate of newspapers or newsletters of that era is the legend "Published by Authority," but to the credit of our early journalists—the Franklins, the Campbells, the Greens, and others—is the historical record of 'publishing in spite of authority.' To preserve freedom of speech they defied the all-powerful governors to present the 'newes' as they saw it. To their courage and foresightedness, we owe a debt of gratitude.







• Built by HARRIS-SEYBOLD-POTTER CO.

## Inks Uniformly

## applied with **SKF**-equipped rollers!

**SKF** Bearings have an important job on this Combination Gravure and Typographical Press. They keep the ink rollers properly positioned. As a result, carefree running at high speeds for long periods is certain. Color is applied uniformly. Register is close. No bearing adjustments are required. And main-

tenance costs stay down. On other types of presses, and on ink mills, matrix rollers, conveyors, folders, shavers—all through the printing industry—you'll also find repeated proof that **SKF** puts the right bearing in the right place.

6057

**SKF** INDUSTRIES, INC.  
Front St. & Erie Ave., Phila. 34, Pa.



## ATF KELLYS

Turn Common Stock into *Quality Preferred*

WHETHER the job is simple line work or the finest process color . . . whether speed or coverage or hairline register is the feature most essential . . . you can be sure an ATF Kelly will give you the most in quality, in the least time, with the greatest economy and profit. Ask your ATF Salesman for details, or write for commercial samples of actual runs that show what Kellys can do for you.

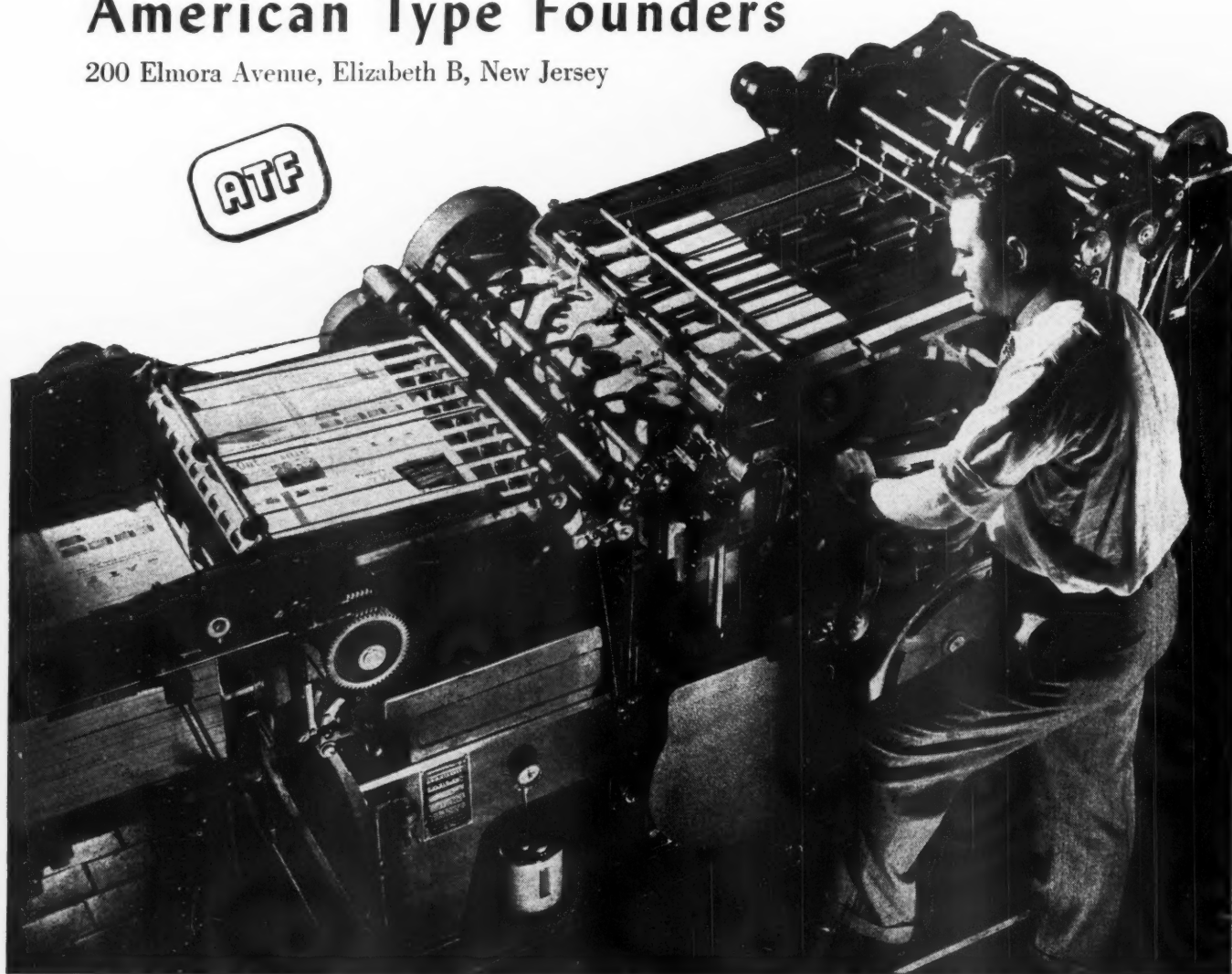
### American Type Founders

200 Elmora Avenue, Elizabeth B, New Jersey

↓  
**ATF No. 2 KELLY**  
handles sheets from 8½" x 11" to 24" x 35"

↓  
**ATF No. 1 KELLY**  
handles sheets from 8" x 12" to 22" x 28"

↓  
**ATF C-KELLY** (*Illustrated below,*  
handles sheets from 7" x 10" to 17½" x 22½"





# SPOT COLOR

• • • ON THE SPOT •

## WHERE AND WHEN YOU WANT IT

**H**UBER makes many types of ink—but *newspaper ink* is a Huber specialty and has been for over half a century.

Huber supplies black ink to leading newspapers in the United States and foreign countries. For example, 10 out of 13 Ayer Award winners used Huber ink. Through long experience and association Huber knows what newspaper publishers want and has set up an organization to exactly fit these needs.

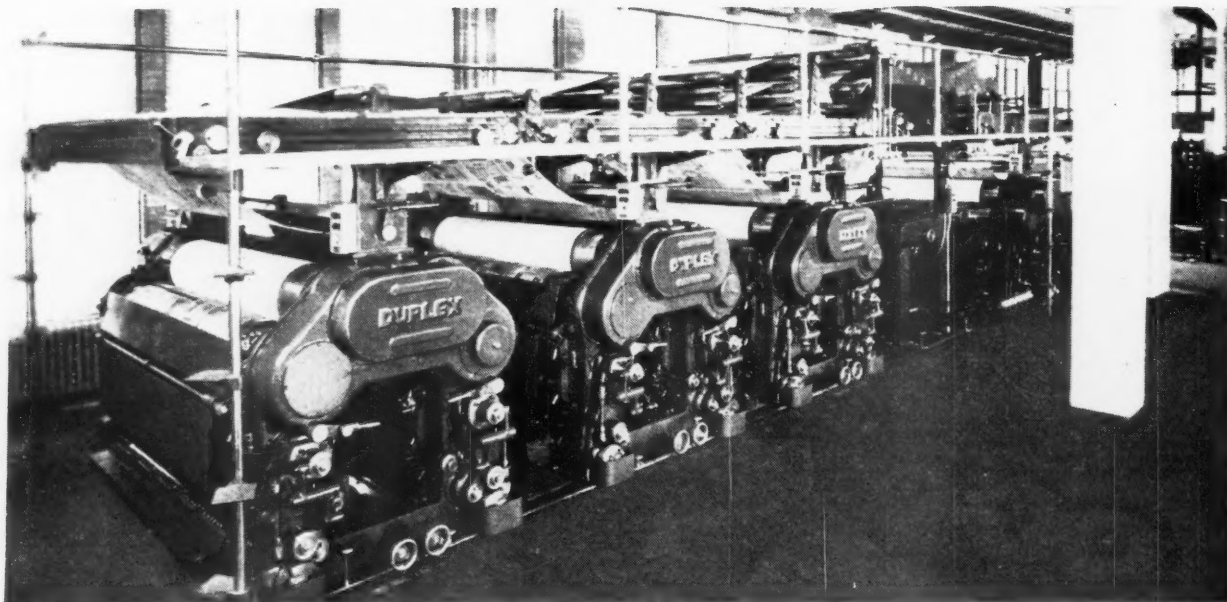
So it's news—and good news!—when Huber provides “spot color” as well as black. For here is real newspaper color from the laboratories and factories of a company that knows newspaper needs. Here, too, is a distributing organization tailored to newspaper requirements—branch offices and warehouses in all newspaper centers; well organized and efficient offices established for many years. Working with newspapers is a “Huber habit”—a mighty good habit, too, in emergencies.

Yes, it's “spot color”—on the spot—where and when you want it—when you deal with Huber. Our *newspaper experienced* technical staff is at your disposal. For complete information address the branch office nearest you: New York; Chicago; St. Louis; Boston; Borger, Texas.

**HUBER PRODUCTS IN USE SINCE 1780**

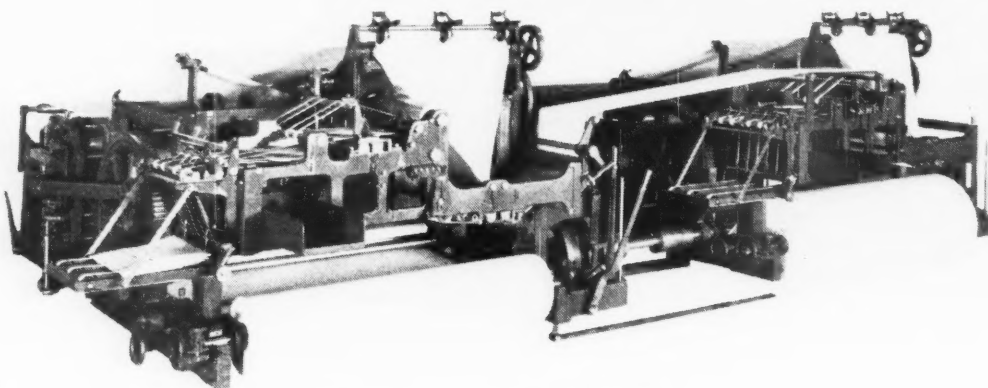


# • • DUPLEX



## DUPLEX HIGH SPEED ARCHED TYPE PRESS

Has steel cylinders, steel gears, ball and roller bearings and many other construction features for quality printing and trouble-free operation. World's finest semi-cylindrical newspaper press.



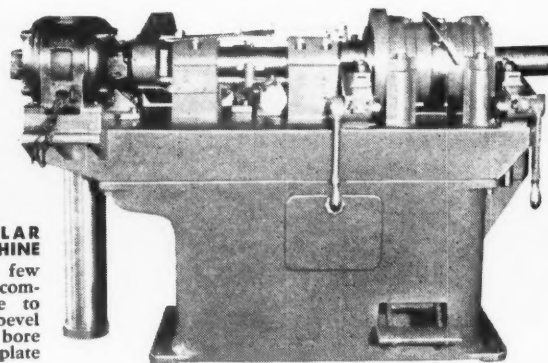
## DUPLEX TWINNED FLAT BED PRESS

Handles up to 16 pages efficiently. Single press handles up to 8 pages.



## THE DUPLEX HEAVY-DUTY MATRIX ROLLER

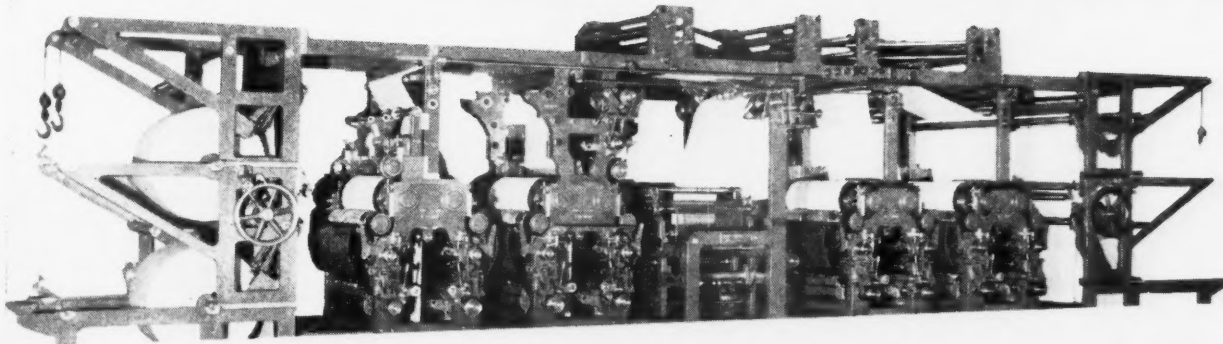
It is a self-contained unit, the motor and controller being attached to the main frames. By a special impression control, the pressure of the cylinder can be instantly adjusted with perfect uniformity.



## DUPLEX TUBULAR FINISHING MACHINE

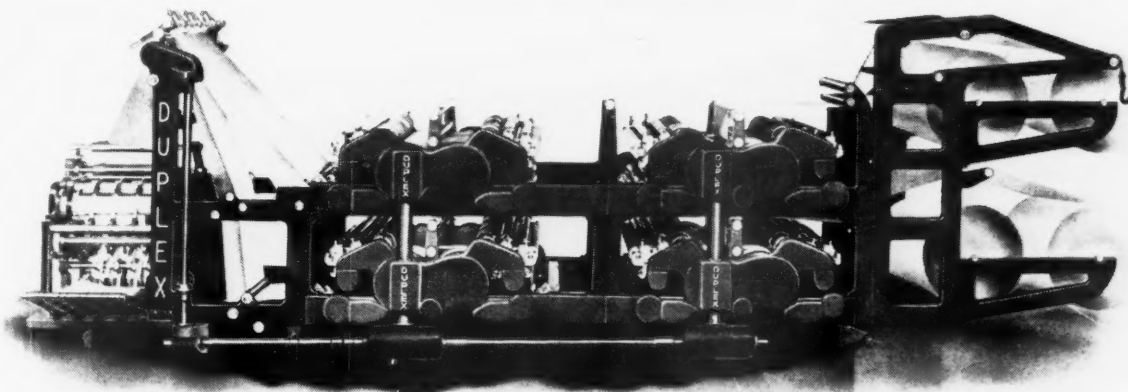
It takes but a few seconds for this combination machine to cut off the tail, bevel both ends, and bore the inside of the plate to correct size.

# EQUIPMENT



## DUPLEX UNITUBULAR PRESS

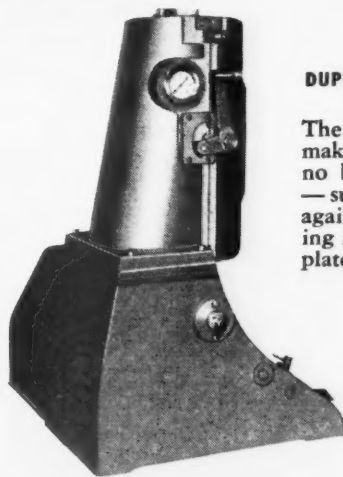
Gives high speed operation from one set of plates. Has steel plate cylinders and anti friction bearings. Unit shown has single color cylinders. Double color cylinder equipment can be added at option.



## NEW DUPLEX STANDARD TUBULAR PRESS

Completely modernized and ready for postwar production.

DUPLEX STANDARD PARTS AND A COMPLETE LINE OF STEREOTYPE EQUIPMENT, ROUTERS, SCORCHERS, ETC., ARE AVAILABLE FOR SEMI-CYLINDRICAL AS WELL AS DUPLEX TUBULAR PRINTING EQUIPMENT.



## DUPLEX TUBULAR VACUUM CASTING BOX

The modern method for making better plates—no buckling of the mat—suction holds the mat against the box smoothing it out and making the plates true and uniform.

**THE DUPLEX PRINTING PRESS COMPANY**  
**BATTLE CREEK, MICHIGAN**  
**PRESS EQUIPMENT FOR EVERY NEWSPAPER**

**MATRIX CONTRAST CORPORATION**  
EMPIRE STATE BUILDING  
NEW YORK 1, N. Y.



GRAND C  
STA

## *Announcement*

### MATRIX CONTRAST CORPORATION

announces the establishment of service facilities on the Pacific Coast. Installations and regular processing of all matrices will now be available to all West Coast newspaper and printing plants on the same service arrangement that has proved so satisfactory in Eastern and Mid-western printing centers. Mr. Jack Faris has been appointed Pacific Coast Manager with headquarters in the Los Angeles branch located at 1105 Trenton Street, Telephone, Richmond 0339.



*Inquire at Matrix Contrast booths 25 and 26 at the A. N. P. A. Mechanical Conference for complete details*

# Members ANPA Mechanical Committee

After a one-year recess, the ANPA Mechanical Conference meets at Hotel William Penn, Pittsburgh on Monday, Tuesday and Wednesday, August 5, 6 and 7. This year's program, aside from discussions of pertinent mechanical topics, will take in a session of plant building and planning. Following are personalities composing the Mechanical Committee.



Chairman **WORTH COURTNEY**, Assoc. Bus. Mgr., Chicago *Herald-American*.



Secretary **WALTER E. WINES**, Manager, ANPA Mech. Dept., New York, N. Y.



Member **JOHN L. BLAKE**, Vice Pres., Scripps-Howard Supply, New York, N. Y.



Member **JOHN A. BURKE**, Production Mgr., Gannett Newspapers, Rochester, N. Y.



Member **A. H. BURNS**, Mechanical Superintendent, N. Y. *Herald-Tribune*.



Member **T. A. CORCORAN**, Purch. Agt., Louisville *Courier-Journal and Times*.



Member **EDWIN H. EVERS**, Production Manager, St. Louis *Globe Democrat*.



Member **LESLIE J. GRINER**, Asst. to Publisher, Ft. Wayne *News-Sentinel*.



Member **MAURICE HAGAN**, Photo-engraving Supt., Philadelphia *Inquirer*.



Member HOWARD J. LAMADE, General Manager, Williamsport (Pa.) *Grit*.



Member JOHN PARK, Production Manager, Chicago *Tribune*.

## Thumbnail Sketch

FROM time to time, *Printing Equipment Engineer* prints brief biographical sketches of members of the ANPA Mechanical Committee. This year, we are pleased to present Howard J. Lamade, Business Manager of Grit Publishing Co., Williamsport, Pa. Mr. Lamade really is well known to mechanical executives inasmuch as he formerly served as a member of the committee a number of years ago, and was reappointed in 1945.

Mr. Lamade is a constant sort of gentleman—he has been with *Grit* for 23 years. He started as a clerk, became assistant mechanical superintendent, business manager and secretary. In his capacity as a member of the ANPA Mechanical Committee, his services have been valuable.

His outside interests, other than newspapering, include the following activities: President, Williamsport Hotels Co.; Director, West Branch Bank & Trust Co., Williamsport Federal Savings & Loan, Wildwood Cemetery Co., and Lycoming County Mfrs. Association. He is also a trustee of Pennsylvania State College.

Clyde E. Cochran has retired as director of engineering of Elwell-Parker Electric Co., Cleveland, O., builder of power industrial trucks, and has been succeeded by Dwight Hanchette, associated with him at Elwell-Parker for many years. Native of Twinsburg, O., Mr. Cochran graduated from Case School of Applied Science, Cleveland, in 1902, and became associated with the company in that year. Cochran pioneered in designing basic models and developing attachments for adapting them to specific load handling requirements, leading to revolutionary changes in the handling of materials. Mr. Cochran was made chief engineer in 1928 and director of engineering in 1943.



Member CHARLES H. RUTH, Mechanical Supt., Washington (D. C.) *Star*.



Member JOHN J. SHEA, Gen. Mech., Supt., Hearst Publications, Inc., New York.

## BOOKS

RECEIVED

### *What Price Supervision*

THE author of *What Price Supervision—How Management Can Build a Stronger Supervisory Force*, has revised the heretofore general idea that the foreman is the connecting link between management and men. He asserts the foreman should be a part of management. Actually, in many instances, it would be more appropriate to speak of the foreman as the "missing link" between management and men.

This book is a rational plea for recognition by management of the importance and responsibility of the foreman. He states that management has largely failed to assume the responsibility of setting up the foreman's job on a basis commensurate with its importance.

The book is dedicated to the proposition that the price of high grade supervision is insignificant in comparison to the cost of its absence. While not written specifically to printing management, yet the context of the book is such that it will apply to any plant requiring departmental supervision.

Although the author pulls no punches in lambasting typical supervisory faults, his criticism is constructive. He offers a definite program, and presents specific suggestions for attaining the type of supervision necessary for the price-tough era ahead.

His book is easy to read, and filled with practical, thought-provoking material. Section I presents the various aspects of the supervisory problem: Pattern of Management-Foremen Relations, Views on Supervision, Outworn Policy, Measure of Leadership, Two Problems—Secure and Develop, Philosophy of Long Standing, Case Histories, Factual Data on Foremen's Education, Education VS Experience.

In Section II, he offers a definite solution and covers: What is Supervision, Well-Balanced Supervision, The Foreman Who Gets Things Done.

Mr. R. D. Bundy, the author, is Industrial Coordinator of the Board of Education, City of Cleveland. He is also a management engineer, with extensive knowledge of supervisory practice gained from over 20 years' experience with many large companies as executive and consultant on supervisory problems.

*What Price Supervision*—By R. D. Bundy. 6½ in. by 9½ in., 46 pages, hard fabric cover, spiral-bound. \$2 fob shipping point. Order direct from National Foremen's Institute, Inc., Deep River, Conn.

*Printing Equipment Engineer* will gladly help you find it.



There's something substantial and friendly about this entrance to the offices of Typographic Service, Inc., Indianapolis, Ind. This advertising typography firm is in its recently finished new quarters in the Graphic Arts Bldg., 215 North Senate Ave., Indianapolis. The building is in the immediate neighborhood of the state capitol building.



## REALIZATION OF AN IDEAL

*Long term planning with careful management results in unusually fine creative typographic establishment for Typographic Service, Inc., Indianapolis, Ind.*

By MacD. SINCLAIR

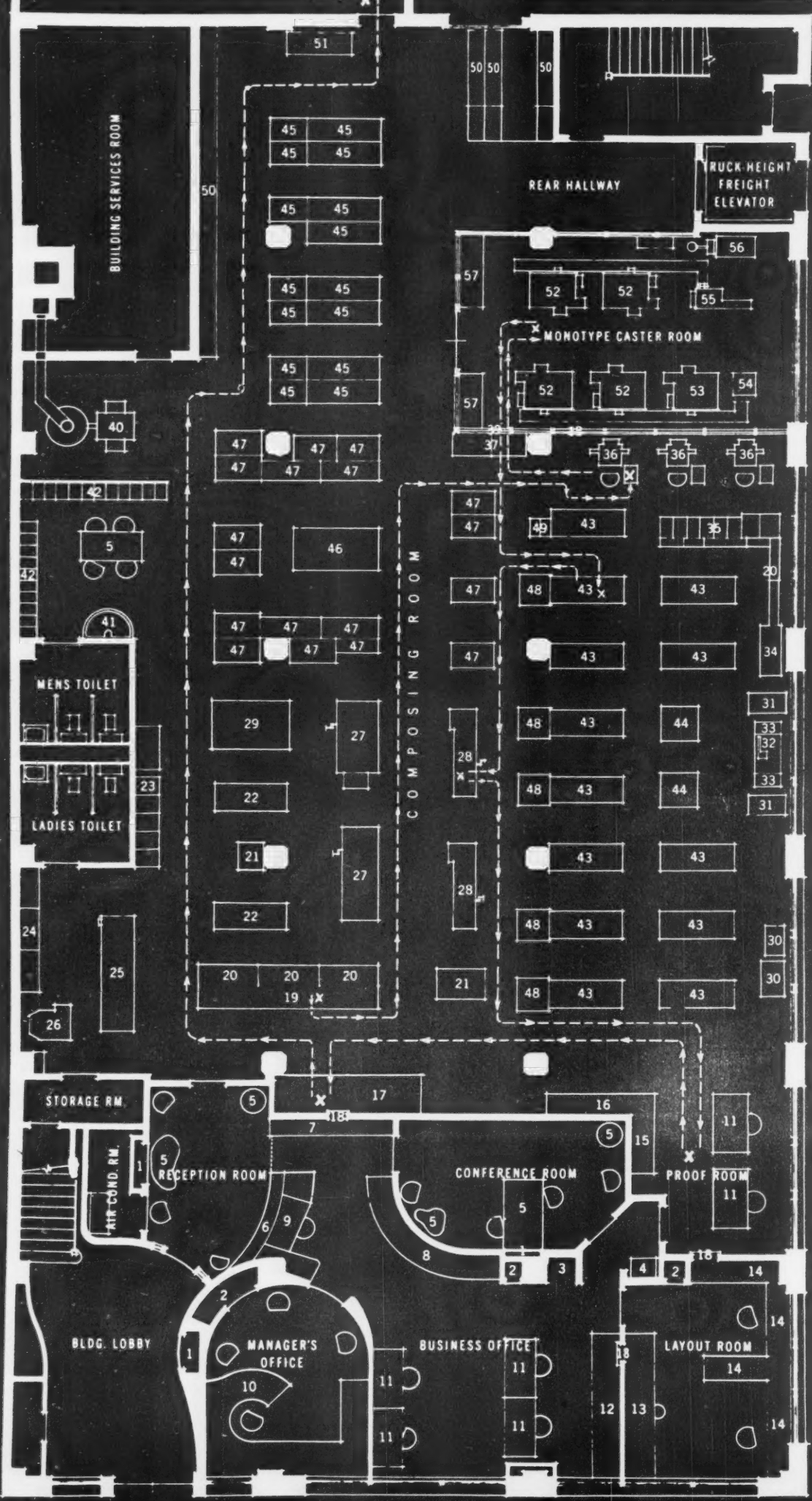
ONCE upon a time this writer asked a printing executive who holds membership in both associations the difference between the functions of the Advertising Typographers of America and the International Trade Composition Association. His reply was colossally descriptive in a few pithy words: "My dear fellow! The Advertising Typographers wear smocks and we don't."

Anyhow, the services afforded by member plants of both associations are important to the advertiser and the printer. Located in many parts of the country, executives in these plants have done much to advance advertising design and pure typography. The services afforded by the advertising typographic plant in particular are important because of the creative nature of the service

rendered. There is an incessant demand for advertising typographic design and this work has fallen into the hands of specialists such as Typographic Service Co., of Indianapolis, Ind.

The highly developed specialty of producing advertising typography is recognized by advertising agencies, manufacturers and merchandizers as an important factor in selling. Typographic

GARAGE AND STORAGE BUILDING  
33 x 65 FEET - TWO STORIES  
TO DELIVERY TRUCK



**Floor Plan Layout - Typographic Service, Inc., Indianapolis, Ind.**

Our composing room executive readers will appreciate this floor plan layout. This composing room is well planned. Floor area is 65 ft. by 130 ft.

With respect to work flow, we will illustrate by following a small job through the plant. Large jobs, of course, would take a slightly different path according to the number of journeymen engaged. For illustrative purposes, a small job consisting entirely of Monotype composition, is assigned by the superintendent 19 to one of the keyboard operators 36. After the keyboard work has been completed the spool is delivered through push-through window 39 to the caster room. Upon completion of casting the type, the Monotype caster operator passes the galley from dump 57 through push-through window 39 to dump 37 where it is picked up by a hand man who sets whatever display type is to be added on worktop 43. The galley containing the job is now sent to proof press 28. Proofs are read in proof room 11. Assuming no corrections are necessary, the type is delivered to shipping table 17. If the job is small, it may be passed through push-through window 18, where a messenger in the reception room takes it for delivery to the customer. If the job cannot be delivered by messenger or is to be locked up for electrotyping, our readers will have no difficulty in following the chase or package to the back door where a truck will deliver it to the customer.

Equipment is identified as follows:

- 1 Fluorescent lighted display case
- 2 Clothes closet
- 3 Safe
- 4 Laboratory
- 5 Table
- 6 Counter
- 7 Counter-height cabinet
- 8 Files, counter-height top
- 9 Receptionist's desk
- 10 General Manager's office. Custom-built desk to three walls of room, curved section open except for shallow drawers; remaining portions carry built-in book cases and files.
- 11 Desk
- 12 Desk-height office supplies cabinet
- 13 In the general superintendent's office is a standing-height work space with special built-in features for layout-art supplies
- 14 Continuous built-in desk space with built-in features for layout men and artists
- 15 Book cases
- 16 Cut files
- 17 Shipping table
- 18 Push-through opening
- 19 Mechanical Production Mgr.
- 20 Galley cabinets
- 21 Materials storage cabinet
- 22 Foundry lockup stone
- 23 Foundry form racks
- 24 Steel storage cabinets
- 25 Vandercook 325 electric proving press
- 26 Paper cutter
- 27 Vandercook 320 proving press
- 28 Vandercook 4 proving press
- 29 Large imposing table with galley storage
- 30 Sorts cabinet
- 31 C. & G. saw
- 32 Rouse mitering machine
- 33 Steel materials cabinet
- 34 Quad and space storage
- 35 Monotype keyboard
- 36 Monotype keyboards
- 37 Dump from caster room
- 38 Push-through space for keyboard ribbons
- 39 Push-through space from caster room to dump
- 40 United American metal furnace and repigging molds
- 41 Bradley wash fountain
- 42 Employees' lockers
- 43 American cut-cost type cabinets
- 44 Flat-top makeup cabinets
- 45 Flat-top type cabinets for lesser used types
- 46 Dead stone
- 47 Galley storage cabinets
- 48 Rolling galley trucks
- 49 Sorts cabinets
- 50 Steel shelving
- 51 Rolling type cabinet
- 52 Monotype composition caster
- 53 Monotype type caster
- 54 Thompson type caster
- 55 Monotype material maker
- 56 Compressor
- 57 Work bench



Merle Rose, Mechanical Production Manager, for Typographic Service, Inc., Indianapolis, Ind.

Service Co. moved into new quarters in September 1945 but it was not until early in April of this year that the finishing work was completed.

Typographic Service, Inc., is located on the ground floor of the Graphic Arts building at 215 North Senate Ave. The building 65 ft. by 130 ft., is immediately adjacent to the state capitol and other state-owned edifices.

President of Typographic Service is Arthur Overbay. He is also president of the Advertising Typographers of America and is a past president of the International Trade Composition Association. It is said that he is the only printing executive in the country to have been elected to both offices. Glenn M. Pagett is layout chief and general superintendent; Gordon W. Fiscus is art director, and Merle B. Rose is mechanical production manager.

Just recently, Mr. Overbay's son, Arthur S., jr., returned with the grade of first lieutenant in the air service. He saw action as a navigator in a B-24 over Formosa, China, and Tokyo. It is anticipated that Arthur, jr., will assist his father in the management of the 40-employee company.

In discussing the new location with the writer, Mr. Overbay stated that his firm could have been moved right into the new quarters from the old location, inasmuch as they would have been passable quarters as comprehended by many printing executives. Instead of doing that, the place was virtually gutted to provide working quarters in keeping with the nature of the services afforded by Typographic Service.

Before discussing the company's new home, we want to mention that the company holds a citation from the Army Map Service for excellence in production. This firm participated importantly in one of the top-secret jobs of World War II—the making of invasion maps. In this shop was set a part of the type for practically every series of invasion maps used on major fronts. The work on each series

was distributed among typesetting firms in key cities through the United States for security reasons. Emergency calls came frequently which kept employees working around the clock. Curiously enough, Typographic Service was chosen to set the type for the citations of which it was awarded a copy.

The entire job of planning and designing the new home of Typographic Service, Inc., was attended to by Ayres, Kingsbury & Ward, Indianapolis architects and engineers in cooperation with Chris Foss, layout engineer of American Type Founders.

It is a difficult matter to try to pass on to the reader through black and white illustration and words (no matter how descriptive) the pleasant and peaceful environment in the offices of Typographic Service Co. The first impression he receives, however, when he steps into the building lobby on the ground floor is that the doorway will admit him to a desirable place.

The heavy doorway through which you enter Typographic Service Co.'s offices is natural oak flanked by fluted glass panels on either side. The surround-



With his hands full of galley containing type fresh from the casting machine, the caster operator depresses the pedal with one foot to raise the push-through window and shoves the galley to the dump in the composing room. It's as simple as that.

ing wood work is blond oak. The vermillion lettering on the door is hand-carved V-shape depression ( $\frac{1}{4}$  in. deep at the apex) in Sans Serif style type.

The interior of the offices are finished in blond oak flexwood. An exception to the blond oak wall finish is that wall section above the curved office files (see 8 in the accompanying floor plan layout). As nearly as we can tell you, this wall section is painted a dull Chinese red. It will be understood by the reader that the interior of these offices is modernistic but not extremely so. We term it "conservative modernism."

One of the things that strikes a visitor is that all cabinets are semi-concealed.

There are no filing cabinets, racks, clothes hooks or boxes—everything being concealed in built-in wall cabinets. The offices are pleasantly illuminated with flush ceiling flood lamps, as will be seen by looking at the accompanying illustrations.

The floor is of asphalt tile. The ceilings are of acoustic plaster painted with water paint.

A sprinkler system exists throughout the plant in both offices and composing room.

The business offices are air conditioned with semi-air conditioning in the composing room. A York automatic air conditioning unit keeps the quarter comfortable. Location of the unit is shown in lower left-hand corner of the accompanying floor plan layout diagram.

### General Manager's Office

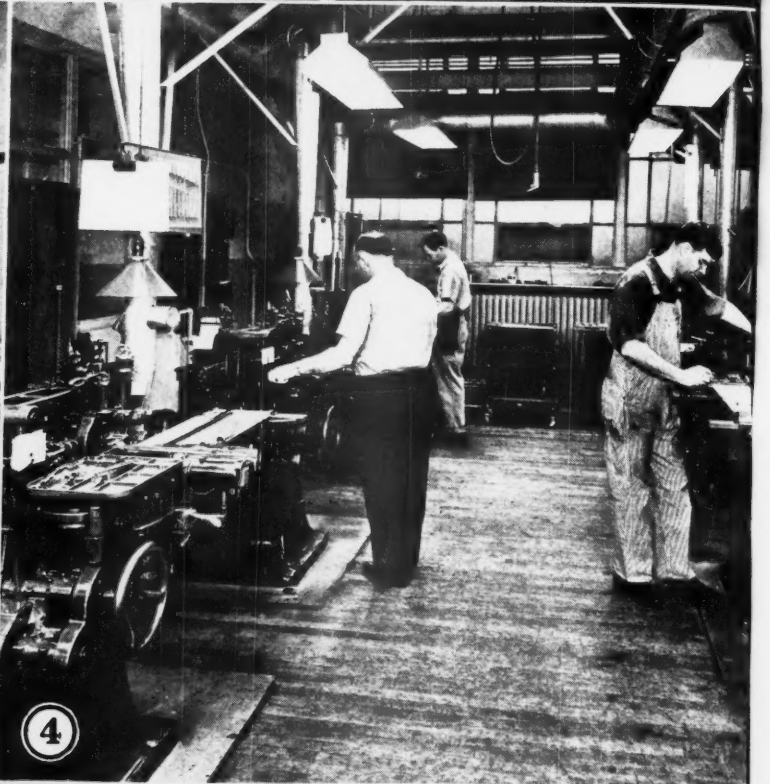
As will be seen from the illustrations and the floor plan diagram, President Arthur Overbay's office is unique. Like the balance of the office area, his office is furnished in quiet and harmonious good taste but extreme modernism is avoided.

Soft, indirect lighting is obtained by slanting the aluminum venetian blinds at the windows and from an electric fixture in the ceiling. The walls are blond oak flexwood. Coarse off-color white fabric curtains stenciled with bold modern design in black, red and grey-green hang at the windows. Extending around a portion of three walls are combination storage cabinets which terminate at one end in a curved desk for Mr. Overbay's use. The cabinets and desk are also finished in blond oak wood. The straight oak chairs are upholstered in top grain leather seats and backs, each one a different pastel color. All papers, books, and the like, are concealed except for those demanding Mr. Overbay's immediate attention. It might be explained in another way that the plain soft-color surroundings of Overbay's office are such that they do not distract attention from the immediate business at hand.

On occasion, Mr. Overbay enters into the planning and design of various jobs coming into the plant of Typographic Service, Inc. On one occasion, he spread the layouts for a 54 page book on top of the cabinets, at which time he, the customer and his layout and production executives conferred upon details.

### The Conference Room

Perhaps the outstanding feature of the business offices is the conference room. It was deliberately designed for quietness, privacy and customer comfort. Here customers and plant executives may confer on work—whether design, layout or work in process. When the doors are closed in this windowless air-conditioned room, absolutely all extraneous noises are barred. Soft illumination is provided from flush ceiling lamps. A telephone is provided for out or incoming calls, and for plant intercommunicating calls. One of the features of the room is the double-top stationary table with straight-back oak chairs upholstered in pastel colored



top grain leather—each one different in orange, tan, brown, blue and green.

The idea of the double-top table, Mr. Overbay explained, is that, for instance, when duplicate layouts or a series of advertising layouts are to be shown a customer, only one sheet at a time is exhibited. If there are six sheets or designs, they are placed in the recess underneath and are exhibited one at a time to the customer. In this way, the customer will not become confused and is better enabled to make satisfactory decisions.

Another feature of the conference room is a heavy hand carved oak frame (shown in the illustration on page 48). It measures 30 in. wide by 40 in. high. Beautiful in its simplicity, the interior is indirectly illuminated. Mr. Overbay intends to exhibit style pages in it for the benefit of customers with whom conferences are being held.

### The Layout Room

A vitally important part of any advertising typography house is the layout room. At Typographic Service, Inc., this department is supervised by Glenn M. Pagett. Gordon W. Fiscus is the art director.

The room has a southwestern exposure. The floor, wall and ceiling are finished similarly to the business offices. The windows are fitted with venetian blinds. Encased ceiling flood lamps shed shadowless illumination over the entire working area.

Along the north side of the layout room is a "standup counter" with Formica top. Rising from the work top on the wall is a framed section of masonry upon which the artist or layout man temporarily hangs copy or other work with thumb tacks.

In the space underneath the standup counter are special drawers, and the

compartments are fitted with doors to conceal the entire storage. The compartments are of such size that those large and awkward sheets of various kinds of board and paper, blue prints, tubes and other supplies and customer copy can be kept in perfect condition without detracting from the appearance of the room in general.

Mr. Pagett uses a double-top table for some of his work. This table is similar to the one installed in the conference room. Its purpose, however, is slightly different. He can keep a considerable number of sheets in confined area when executing layout work.

Another important piece of equipment in the layout room is an illuminated shadow box with horizontal ground glass top. The interior of the box is lighted with fluorescent lamps. The purpose of this shadow box for register work and viewing purposes is obvious.

An air-brush is likewise provided, the compressed air being piped from the air compressor located in the Monotype caster room.

### The Composing Room

When one steps into the composing room from the office for the first time, he receives a distinct impression of an unusually pleasant and well-ordered mechanical department. This statement doesn't describe the general environment of the composing room—like the offices, it must be seen to be appreciated. Merle Rose, well known to many Printing House Craftsmen, is mechanical production manager.

In attempting to describe the department, we'll say the ceiling and walls are finished in three shades of green, none of which is what could be called dark in tone. The ceiling is very light, the side walls a trifle deeper with a wainscoting

of the deepest shade extending upwardly from the floor. The floor itself is completely covered with deep brown marbled asphalt tile. Illumination is provided by continuous strips of inverted trough-type fluorescent lamps. The spaciousness of the room itself would provide comfortable air even without the semi-air conditioning arrangement. Natural daylight is admitted along the entire south wall.

One of the fine features of the department is that you can stand any place in it and see clear across the room. The only overhead equipment is in the lock-up section near a side wall.

There is considerable mobile equipment in the composing room to eliminate necessity for carrying galleys or pages of type from type cabinet to proof press to storage to shipping counter. At the end of each type cabinet which is devoted to galley and page makeup is a galley truck in which are compartments for as many as 32 galleys. These trucks are equipped with rubber-tired wheels for easy transport to the proof press. Ample floor width is allowed in the aisles between working cabinets to permit free passage of the trucks.

Bulk of the sawing, trimming, mitering, mortising and like operations is done in a centralized location. This equipment consists of two Milwaukee saws and two Rouse mitering machines. (See 32 and 33 in the floor plan equipment diagram accompanying this article.)

While it is not a new idea, it might be well to mention that the indispensable string used for tying up type pages is supplied from a tin can attached to one end of the type cabinet. The string is led from a hole punched centrally in the lid.

Metal hair spaces—those can't-do-without midget items in advertising typography, are kept in clear glass jars

**Views in Elegant Quarters of Typographic Service, Indianapolis, Ind.** — This firm executes advertising typography. It is noted for its creative work. It serves advertising agencies, printers, manufacturers and merchants. Its work can be seen in America's most widely read magazines, books, catalogs, direct mail pieces and newspapers, and on posters. These views do not do justice to the beauty of the offices.

**1**—President Arthur Overbay in his office. Walls are of blond oak flexwood, ceiling is acoustic plaster, the floor is overlaid with asphalt tile, drapes are off-color white with black-red and grey-green figure. Ceiling fixture furnishes indirect lighting. All files, papers, reference books, catalogs and the like are carried in the wall cabinets entirely out of sight. The wall cabinet terminates in a curved section which serves Mr. Overbay as his desk dictating to Miss Elsie Thornton, secretary and office manager. Chairs are straight oak upholstered with pastel color top grain leather.

**2**—View of section of Conference Room. This room is windowless, is noiseless and is air conditioned. It is lighted by flush ceiling flood lamps. Absolute privacy and quiet are assured when a conference is being held—either by members of the firm or with a customer. The specially built table is double topped. If a customer is being shown say six different designs, the designs are placed in the recess underneath the table top. Then they are shown to him one at a time. Theory is that in this manner the customer will not become confused and will be better able to make satisfactory decisions. The massive natural finish, hand-carved oak frame is lighted indirectly behind the frame itself. This is used to exhibit examples of customer designs and layouts.

**3**—View in west end of the Layout Room. This department is finished similarly to the conference room. Nearest to you at left is Glenn Pagett, Layout Chief and General Superintendent. Immediately behind him is Gordon W. Fiscus, Art Director. At right is General Manager Arthur Overbay. At the right side of the room is a simple solution for an irritating problem. The

stand-up counter with Formica top permits layout or inspection work while the frame masonite backboard is used for hanging copy with thumb tacks. In the drawers and compartments underneath the worktop are spaces for keeping artists' materials, blue prints, large layout sheets, drawing paper and board and rolled material such as tracing cloth and mailing tubes.

**4**—The Typographic Service Caster Room probably is one of the finest, if not the finest, of its kind in the country. Under the supervision of Frank Stroy, all composition work is cast here, as well as separate type and strip spacing and rule material. The room is well ventilated and is kept as clean at all times as you see it in this picture.

**5**—The composing room, of which this is a sectional view, is in charge of Merle Rose, Mechanical Production Manager. In the foreground is a specially built truck with rubber tired wheels. This truck is used for rolling forms to be electrotyped, locked in chases, up to any one of the several proof presses. After the forms are ready to be sent to the electrotyper, the truck is rolled to the rear end of the room to the delivery truck. Also shown are two of the rolling trucks used for transporting galleys from makeup bank to one of the proof presses.

**6**—Hand section of the composing room. Amply lighted with continuous inverted trough-type fluorescent lamps, printers have no difficulty with glare. Asphalt tile completely covers the composing room floor. Note the clear view across the entire working area. This type of worktop also permits better air circulation and lighting.

in convenient locations. Point sizes are 6, 7, 8, 9, 10, 11, 12, 13, 14, and 18.

A means for conserving footwork between the office and composing room consists of two vertical slidable and counterbalanced lift doors, each perhaps about 12 in. high. One of these, 18, on the accompanying floor plan layout diagram is between the proof room and the layout department. The other, 19, is between the shipping counter 17 in the composing room and the counter-high cabinet 7 in the business office. Proofs, type, copy and memos can be passed either way through these sliding doors.

A considerable part of Typographic Service's business is in furnishing reproduction proofs for offset printing. The firm uses five Vandercook presses of varying size, the largest being a No. 325 Vandercook with capacity of full size newspaper page.

#### The Caster Room

The Monotype equipment in the Typographic Service plant consists of three keyboards, four composition casters, one type caster, a material maker and a Thompson type caster. The keyboards are located outside the caster

room in the composing department.

Special pains were taken in the construction of the three-side glass enclosed caster room to provide every convenience needed by such equipment to obtain maximum production and to deaden the machine operating noises.

The floor is of concrete over which was laid 4 in. of loose acoustic material tamped as solidly as possible. Over the acoustic material was laid hard maple flooring. Each machine is mounted upon a 1 in. section of rubber mat cut to the size of the machine base which rests upon it. The ceiling is of acoustic plaster. An efficient suction ventilating system is provided, even to the extent of running individual ducts down to the vents on the metal pots to draw off fumes and heat.

Another foot-step saver is a push-through window 39 between the caster and composing rooms. The caster man depresses a foot treadle to raise the window vertically when he wishes to pass type galleys from the work top 57 to the dump 57 in the composing room.

#### Other Features

Typographic Service bears the reputation of having the most complete assort-

ment of type faces between New York and Chicago. Thus would be included little used faces for which there is occasional demand. Some of the faces demanded from time to time might be used for historical purposes or because of sentimental reasons. It has been estimated that 50 tons of type are carried for instant use upon customer demand. Many of these are stored in 21 flat-top cabinets in the rear end of the composing room. Sturdy open steel shelving (50 in the layout diagram) is used for storage of type forms which will be used again in the future.

In the metal remelting department is a United American furnace with slotted eye twin molds.

A circular Bradley fountain is used by employees for wash-up purposes. There are plenty of steel clothes lockers and a table with chairs for employee convenience.

#### Private Garage

Immediately adjoining the rear of the composing room is a two-story 33 ft. by 65 ft. garage building. Typographic Service uses the ground floor area for its automobile delivery and incoming shipment services.

## Vandercook Announces

## New Safe Electric Proof Press

By A. G. FEGERT

**A** NEWSPAPER proof press, electrically operated and geared to run up to 40 proofs (six columns wide) a minute, moved speedily along in routine order—when suddenly the operator reached forward and extended a finger right into the path of the approaching inking roller.

Was the finger snapped off?

No, but it might have been if the proof press had not been one of the new Vandercook Safe Electric presses.

"What happened?" asked the startled onlooker, not knowing about this new feature

"Nothing, excepting that the machine stopped," calmly answered the operator, who happened to be E. O. Vandercook, president and general manager of Vandercook & Sons, Inc., Chicago, and obviously enjoying the startled look of this interviewer, for whom the demonstration had been arranged.

"See this rod extending from side to side just ahead of the impression and inking rollers? Well, that's part of the new safety device we have perfected and, as you saw, it will stop the press instantly. Look at my finger. Do you see any scratch or mark on it as the result of

sticking my finger in front of the fast moving rollers?"

The writer looked and, of course, had to acknowledge there was no indication of a bruise or scratch.

"If that surprises you," continued Mr. Vandercook, "you will hardly believe it if I tell you that we can place an ordinary hen's egg directly in the path of the ink and impression rollers and that this Safety Bar will instantly stop the press the moment it touches the egg—without even cracking the shell."

This interviewer looked at Mr. Vandercook dubiously. Knowing the elder

### Detail Views of Vandercook No. 23 Safe Electric Proof Press

**1**—New No. 23 Vandercook Safe Electric Proof Press—capable of delivering up to 40 proofs per minute with safety. Bed size of press is 15 in. by 26 in., and floor area required is 36 in. by 57 in. overall.

**2**—Close-up of inking mechanism showing large motor driven ink drum, vibrator and four rubber form rollers. Fresh ink is fed to the inking rollers by this drum before each impression. This view shows motor starting lever, which also moves vibrator into contact with ink drum. The pilot light shown in upper left corner of this illustration indicates to the operator that the motor is on and the press is ready to run.

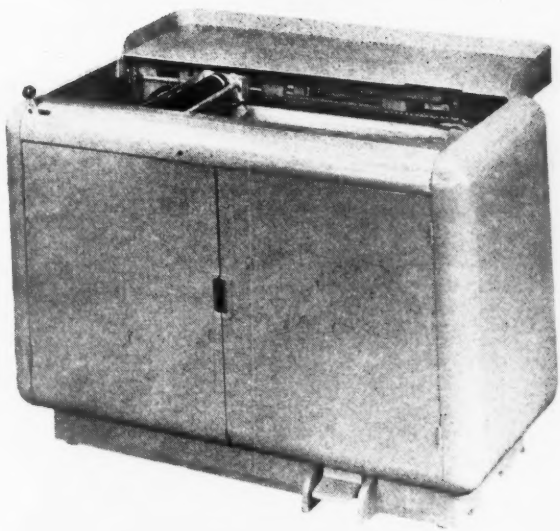
**3**—Any obstacle,  $\frac{1}{16}$  in. or more above type high, will instantly

activate the Safety Bar and stop the press—including a slug as shown in this reproduction, or a workup of any kind.

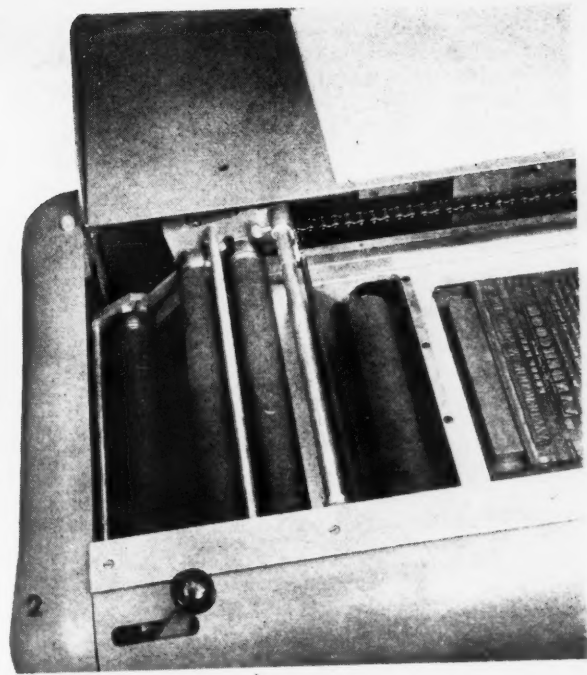
**4**—Showing location of Safety Bar just ahead of both the impression cylinder and inking rollers. Though sturdy in construction, this safety mechanism is so sensitive to the touch, manufacturer states, that it will instantly stop the press—even on contact with a fragile object like an egg, without cracking the shell.

**5**—Front view of mechanism, with hinged doors open showing how all parts are readily accessible.

**6**—Rear view of driving and operating mechanism with hinged doors open to show accessibility of parts.



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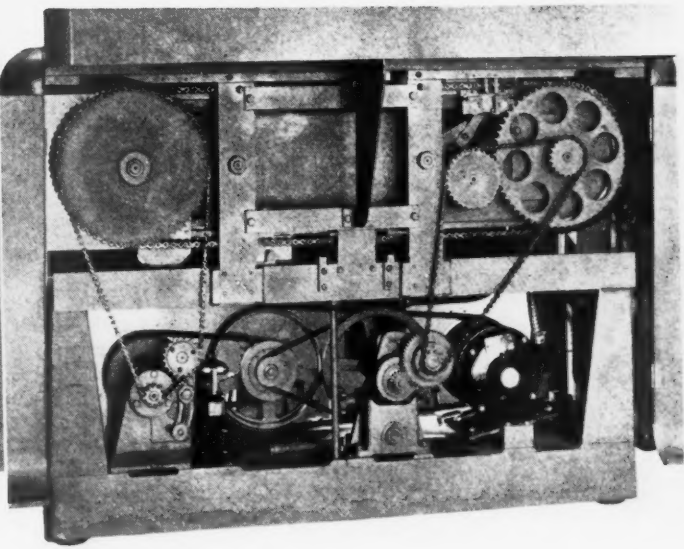
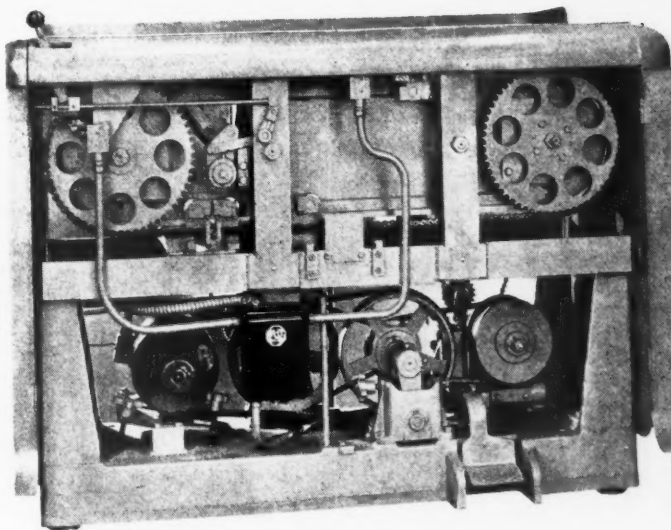
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Mr. Vandercook (father of the three sons now operating the internationally known business which he founded in 1909) and that the company had been built upon a foundation of truth-telling, the interviewer did not wish to put his doubts into words. And yet, to think that an ordinary hen's egg could stop the speeding mechanism of this new proof press instantaneously without injuring an egg seemed to be unbelievable.

"Can you really do that?" the interviewer asked.

"We've done it often," Mr. Vandercook replied, "and I'll demonstrate it for you, too."

So then he did—and that's when this interviewer concluded that Mr. Ripley, of *Believe It Or Not* newspaper fame, should be paged. For the demonstration is quite dramatic. A hen's egg, held directly in the path of the last moving rollers, will stop the press instantly without cracking the fragile shell the moment the Safety Bar touches it—just as Mr. Vandercook's finger also stopped it without damage to himself.

Following the demonstration, Mr. Vandercook related the story of the commercial photographer who also saw this egg demonstration just before making the photographs for this article. Picking up the egg, the photographer held it up to his ear, shook it vigorously, and then commented, "By golly, it's a real egg."

Without going too much into technical detail, Mr. Vandercook explained the operation of the Safety Bar which stops the press when any interference to normal operation occurs in the path of either the ink-rollers or impression cylinder. This interference may be either the press operator's hand or an upwardly projecting slug, lead or type character.

"To those who don't know the principle of operation of this press," said he, "the ink roller carriage and the impression cylinder carriage are attached to endless chains which are mounted on sprockets—one pair at each end of the press bed. The two carriages may make up to 40 circuits per min., or in other words, they pass over the press bed upwardly of 40 times per min. The motion of the carriages is controlled by a foot pedal, leaving the operator's hands free to handle the proof paper.

"Now, if the operator should inadvertently leave his hand or a finger in the path of the oncoming carriage or a slug should project upwardly from the galley (see accompanying illustration) a Safety Bar on the leading edge of either carriage is depressed which in turn causes the press to stop through the use of mechanical and electrical mechanisms as follows:

"When the Safety Bar is tripped, two spring-actuated dogs (one at either side of the carriage) fly outwardly and engage the teeth in the ratchet bars mounted one each at the front and back of the press bed. When the two dogs engage the ratchet bars, the roller carriage is disengaged from the driving chains and stops instantly. The ratchet bars on the press bed move ahead about  $\frac{1}{8}$  in. when the dogs engage. This movement is controlled by springs to cushion the stopping of the cylinder carriage. This slight

movement of the ratchet bars actuates a microswitch which in turn energizes a magnetic switch which controls an electromagnetic brake to stop the motor connected with the driving chains.

"After the obstruction has been removed, the carriage is automatically reconnected to the driving chains by moving it ahead about 12 in. (the electromagnetic brake stops the chains in about 12 in. of travel). Operation of the press can then be resumed after manually resetting the microswitch."

In explaining the more detailed mechanical action of the Safety Bar feature on the new No. 23 Vandercook Safe Electric Proof Press, Mr. Vandercook stated that any obstacle  $\frac{1}{16}$  in. or more above type high which gets in the way of either the inking or impression rollers will instantly activate the Safety Bar and stop the press—as, for example, the slug in the accompanying photograph or a workup of any kind.

"How long did it take your men to develop this new press, especially the safety feature?" queried the writer.

"Oh, about ten years," Mr. Vandercook answered casually.

"You mean ten years?"

"Yes, that's right."

"Why, the way you say that," I exclaimed, "you don't seem to attach any importance to the fact that it took ten years to perfect this press. Doesn't ten years seem like an awfully long time to work out the ideas for just one proof press?"

"You'll pardon me for saying so," replied Mr. Vandercook, "but your comment indicates that you probably never worked out engineering problems such as this. Believe me, they are not the result of magical manipulation. We who work out these improvements in proof presses know that the only way to develop a new idea is to stick to it until it is proved workable or impractical. It would be difficult to describe all that my two brothers, their staff of assistant engineers and capable craftsmen did to develop this proof press. The best answer is that we have had one of these presses at work in the *Chicago Tribune* for over four years—and it has a perfect safety record."

While the No. 23 is a new press, with many new ideas in design and features, it was interesting to learn that the mechanical principles embodied in the press have been in actual use for many years but were greatly improved to make the unit safe, more durable, and easier to maintain.

During the interviewer's visit in the Vandercook establishment, which had been enlarged during the war period to increase the manufacture of critical war materials, he noticed other types of presses in the making—one of which will deliver a finished 4-color proof in 3 sec. But, that's another story.

Still another story is that plans are now being made for greatly enlarging the Vandercook factory to increase production facilities and supply the increasing demand for their proof presses and other premake-ready equipment among printers, photo-engravers and newspaper publishers, both here and in foreign markets.

## Check List for Every Mechanical Executive

**S**POKESMAN for the industry in New York, the New York Employing Printers Association has published an illustrated bulletin in which are described the advantages to be enjoyed by women while working in New York pamphlet binding plants. The bulletin is a frank effort to induce women to enter employment in these plants. Working conditions, pay, work week, and other subjects pertinent to employment are discussed. It is a fine piece of educational literature for prospective employees and executives as well.

A supplemental list showing the advantages of good housekeeping in binderies has been compiled by NYEPA. This supplemental list has been sent to binderies in New York area.

*Printing Equipment Engineer* is printing the supplemental list entitled *Good Housekeeping* below because we believe our mechanical and production executive readers may benefit by comparing the items with their own plants.

The list is as follows:

### GOOD HOUSEKEEPING

In the accompanying pamphlet we boast of the light and airy plants we run, the clean wash and clothes room we have, the congenial and happy atmosphere that surround these fine working conditions. So that we may live up to the boasting and get these girls to stick, we offer you some of the advantages of good housekeeping and a check list to use as a guide to see if your house is in order.

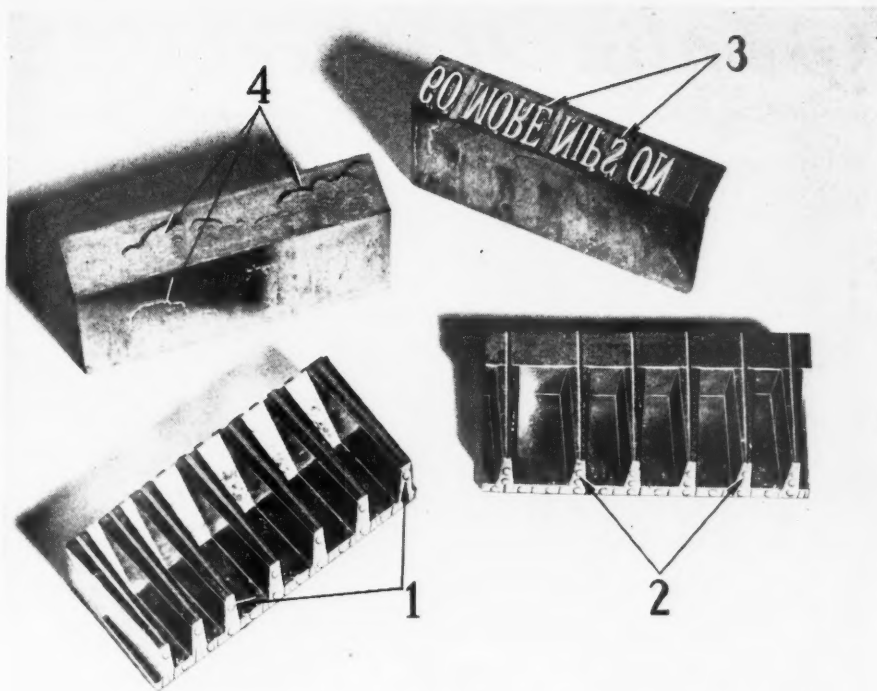
#### Advantages of Good Housekeeping

1. Production rate increases because of orderly, businesslike condition of departments, removal of obstacles to production, production control made easier.
2. Quality control of work follows order and cleanliness control of conditions.
3. Paper, wire, board, glue, etc. conserved and salvaged.
4. Time saved. Workers have more room to operate freely. No lost time in clean-ups to get space in which to work.
5. Floor areas are cleared for production instead of being littered with rubbish or crowded with skids of paper.
6. Safety protection made more certain. Clear, clean floors cut down stumbling and tripping.
7. Cleaning costs cut down. It is cheaper to keep dirt down than to remove long-time accumulations.
8. Fire protection improved.
9. This is one of the most important. Morale is heightened. Workers used to decent conditions at home become more interested in the plant when cleanliness and order are enforced. There are no disadvantages in cleanliness and orderliness.

Here are the standards that you should strive for in order that your plant will rate with the best. Check yourself, you

(Continued on Page 54)





Views of several line-composing machine headletter slugs. At 1 are shown little buttons cast on the ribs of an Intertype slug. Upon cooling, these ribs will shrink in height more than the body or wall side of the slug. The buttons are trimmed by the back knife making the rib supports the same height as the wall side of the slug. At 2 are shown extra jets in the mouthpiece of a Linotype. These jets are trimmed by the back knife just the same as the regular mouthpiece jets. The rib jets not only provide support for the slug under stereotype mat molding pressure, but they assist in casting clear letter characters. At 3 are shown imperfect headletter characters. They cast that way because the mouthpiece, and mold temperatures are not properly adjusted. Explanation is made in the accompanying article.

## Banana Machine

### Suggestions for casting clear-face headletter slugs on line-composing machines

FROM time to time, *Printing Equipment Engineer* receives requests for information about casting newspaper headletter slugs on line-casting machines. The requests are directed toward two accomplishments: (1) Clear faces on slugs which will not print gray in the paper, and (2) Slugs that will "stand up" under stereotype molding pressure.

Before suggesting specific remedies, let's discuss the headletter machine and the conditions under which it is sometimes operated. In many instances, in newspaper composing rooms, headletter machines are equipped to produce an extreme range of point size composition. The reason is that the operator can work on straight-matter or similar composition when there is no head composition to be done at the moment. Machines in various plants have been equipped with 5½ pt., 6 pt. or 8 pt. matrices, perhaps some 12 pt. or 14 pt. and fonts of 24 pt. and 36 pt., according to the volume and variety of composition to be produced in a particular plant. We mention the 5½ pt.-36 pt. body range here to say that maintenance care of a headletter machine should be partial to large body size slug production.

One of the difficulties in maintaining the casting mechanism of headletter machines is to try to make it possible for the operator to turn out solid large size head slugs in quantity when needed. In a newspaper plant it is to be understood that the entire force is working against the time element. Since head composition is the predominant function of a headletter machine, the general idea is that these slugs can be produced quickly and in "bunches" as needed. Smaller type face composition, therefore, is a secondary matter. Those who are not familiar with conditions in a newspaper composing room might ask: "Well, what of it? The machine is equipped for that purpose."

We won't assert that a headletter machine should receive the best of maintenance care. Rather, we would say the casting mechanism should be maintained according to the peculiar needs of the machine so that it can be made to produce solid, clear-face headletter slugs that will stand up under the stereotype molding process and will not print with a gray or imperfect face.

Mostly, imperfect headletter slugs appear after a machine has been in use

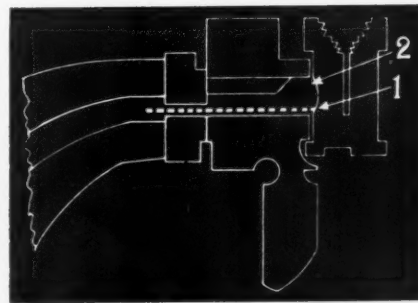
for a period of time. The parts no longer have the factory fit and compensatory maintenance care may have been neglected.

It might as well be mentioned here that several items pertinent to good slug production on any machine will be taken for granted. There isn't much use in discussing good headletter production if any of them are overlooked. They are as follows: (1) Metal in reasonably good condition; (2) Metal pot crucible well and plunger must be kept clean and metal should not escape from between the well and plunger when the plunger makes its casting stroke; (3) Pot crucible throat must be free of oxide accumulation; (4) Mouthpiece jet holes must be kept free from oxide accumulation which by reason of decreasing inside diameters of holes will decrease full flow of metal into the mold; (5) Mouthpiece vent slots must be kept clean to permit free escape of air when the metal is injected into the mold; (6) Thermostats should be adjusted to throw on heat within reasonable variation + or - of metal temperatures<sup>1</sup>, and (7) Metal pot should be fed automatically.

#### Large Air Pockets

Two extremes in slug deficiencies usually occur. One is when slugs cast  
(Continued on Page 94)

<sup>1</sup>"Reasonable" variation, + or -, means within 10 deg. F. of the temperature for which the thermostat has been adjusted, for instance, sometimes in the case of machines equipped with electrically heated metal pots where the heating units are located in the pot jacket outside the crucible. When the metal cools below the temperature for which the thermostat has been set, the thermostat will "throw in" but by the time the heat from the elements is transmitted to the metal, the temperature of the metal may drop 10 deg. A reverse action occurs when the thermostat is thrown out at which time the heat of the metal will build up 10 deg. In other words, in case the thermostat is set to throw in at 540 deg., the metal will drop to 530 deg. before it will start to heat up. When the thermostat is thrown out of action at 545 deg., the metal continues to rise until it reaches a temperature of 555 deg.



Cross section diagram shows pot crucible mouthpiece, mold and headletter matrix on line-composing machine. The heavy dotted line indicates flow of molten metal from the mouthpiece jets, through the mold cell and point of impact against the matrix letter character. As the molten metal impinges against the matrix letter characters at 1, it loses its directional flow. The top parts of the letters cast without trouble, but the lower part of the letters at 2 (being upside down in front of the mold cell) may cast with a disturbed face if the mechanism and metal temperature are not maintained properly, because while the mold cell is filling with metal, the metal is already in process of solidification.

## CHECK LIST

(Continued from Page 52)

may not be 100% now but with a minimum of time, effort and expense, you can soon answer *yes* to every one of these requirements.

### Check List for Maintaining an Orderly Plant Toilets, Washrooms and Locker Rooms

1. Daily cleaning and rubbish removal are vital. Floors, bowls, and basins should be washed. Frequent painting is an aid in good sanitation.
2. Several rubbish and butt cans should be used in wash rooms. These painted in bright colors will invite use.
3. Daily use of inoffensive disinfectants keep such rooms germ and vermin free.
4. Good light and ventilation add to health, cleanliness and efficiency.

### Walls, Windows and Ceilings

1. Walls should not be used for storage of materials such as small wires, cord, wiping rags, etc.
2. Unnecessary bulletin boards, production boards, charts, pictures, etc. should be taken down.
3. Walls should be vacuum cleaned several times a year.
4. Shop walls and ceilings should be painted when cleaning no longer removes the dirt or when lighting can thus be improved.

### Aisles, Exits, Stairways

1. Traffic lines painted along aisles will help keep them clear of skids.
2. Exits and the area around them should be kept clear at all times. Fire regulations are violated when this is not observed.
3. Stairways must be kept clear of all materials, empty skids, rubbish and dirt. If corners are painted white, they will be kept clear from papers, dirt, tobacco juice, chewing gum and other unsightliness.

### Floors

1. Oil, spoiled sheets, grease, dirt should not be allowed to accumulate under machines.

### Drinking Fountains

1. Drinking fountains should be washed daily. Do not allow use of community drinking cups or glasses as these spread disease.
2. Signs should be put up to discourage the use of fountains as places to throw gum or as cuspidors.

Following a recommendation of the committee, a representative of the Association staff will arrange to review with you any problems you may have in connection with adapting your plant to these standards. With the cooperation of Headquarters, he may be able to help you locate suppliers on services that you may find necessary to make your plant the glowing example of good housekeeping that will mean so much in attracting new employees and keeping the old employees on the job.

## Gremlin Matrices on line-composing machines do disappearing act with automatic device invented by J. W. Powers — Particularly suited to Teletypesetter equipment

J. W. POWERS, line-composing machinist with the Burlington (Vt.) *Free Press*, has devised a matrix push bar device which automatically pushes the last matrix in the right-hand side of the assembled line to vertical position as the assembling elevator starts its upward stroke to the delivery slide on Intertype and Linotype machines.<sup>1</sup> The push bar is operated inwardly (to the left) with each upward stroke of the assembling elevator even though the extreme right-hand matrix may be standing vertically within the assembling elevator rear rail and gate pawls.

In plants where assemblers receive the best of attention, an occasional right-hand matrix may fail to be flipped by the assembler star wheel to a vertical position in the assembling elevator. Where the machine is manually manipulated, the operator forms the habit of using a finger to bring the top of the matrix within the elevator pawls.

In the case of Teletypesetter-operated machines, however, Mr. Powers felt that some automatic mechanical means should be provided to avoid the occasional spilling of matrix lines and the jamming of

the assembler chute finger which results when a matrix protrudes outwardly at an angle from the right side of the assembling elevator. In the case of a machine operated by Teletypesetter, production is stopped until the abnormal condition is cleared away.

Mr. Power's device operates to bring the right-hand matrix within the assembling elevator pawls irrespective of whether the line is composed on the normal or the auxiliary aligning rails of the assembling elevator.

It is not the inventor's intention that the device be used as a means for neglecting periodical replacement of the assembler star when its spokes have become worn to the extent that they will not push matrices to an upright position within the assembling elevator pawls. The same thought applies to assembler star tension, assembler entrance guide, spaceband buffer finger and chute finger adjustment, as well as elevator pawl and assembler slide adjustment and maintenance care.

<sup>1</sup>See patent No. 2,399,252 reported in June issue of *Printing Equipment Engineer*, page 35.

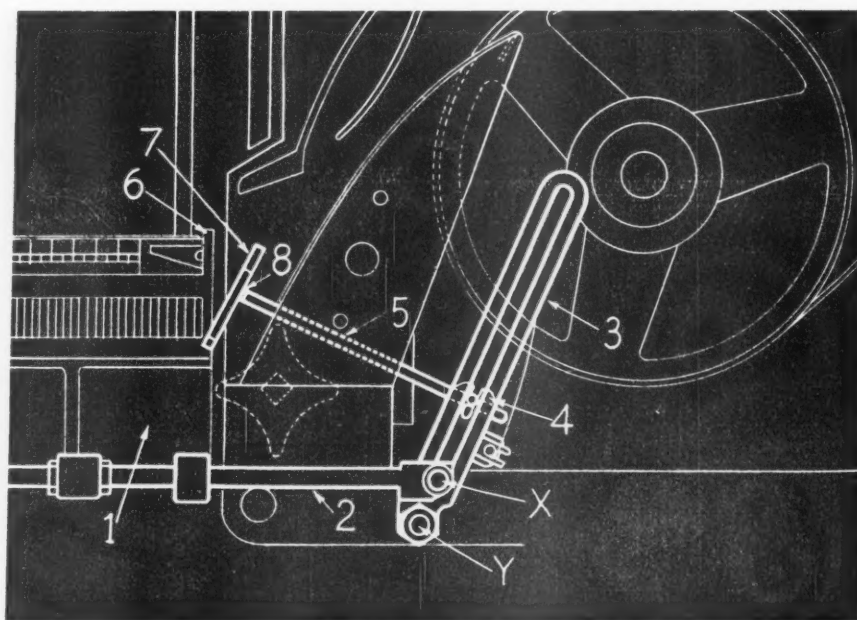


Diagram illustrating how the Powers push bar device automatically straightens up the last matrix in a line on line-composing machines. This device is primarily designed for use on Teletypesetter-operated Intertypes and Linotypes. The device is operated as follows: When the assembling elevator 1 is raised to the delivery slide, the shaft 2 which is mounted in the regular manually operated duplex rail lever shaft brackets rises with the assembling elevator. The shaft 2 is fitted with a roller bearing stud at X. The upward movement of the assembling elevator by engagement of the roller bearing stud in the slot causes the cam lever 3 to move to the left; being pivoted at Y, the cam lever rotates through a sector of a circle. A pin or stud in push bar lever 4 in engagement with cam lever 3 causes the matrix push bar 5 to bear against and bring matrix 7 within the assembling pawls 6. A small brass roller mounted in push bar 5 contacts the matrices. When the assembling elevator returns to normal position the push bar 5 is retracted underneath the chute rail springs and out of the way of matrices which will be assembled in the next succeeding line.

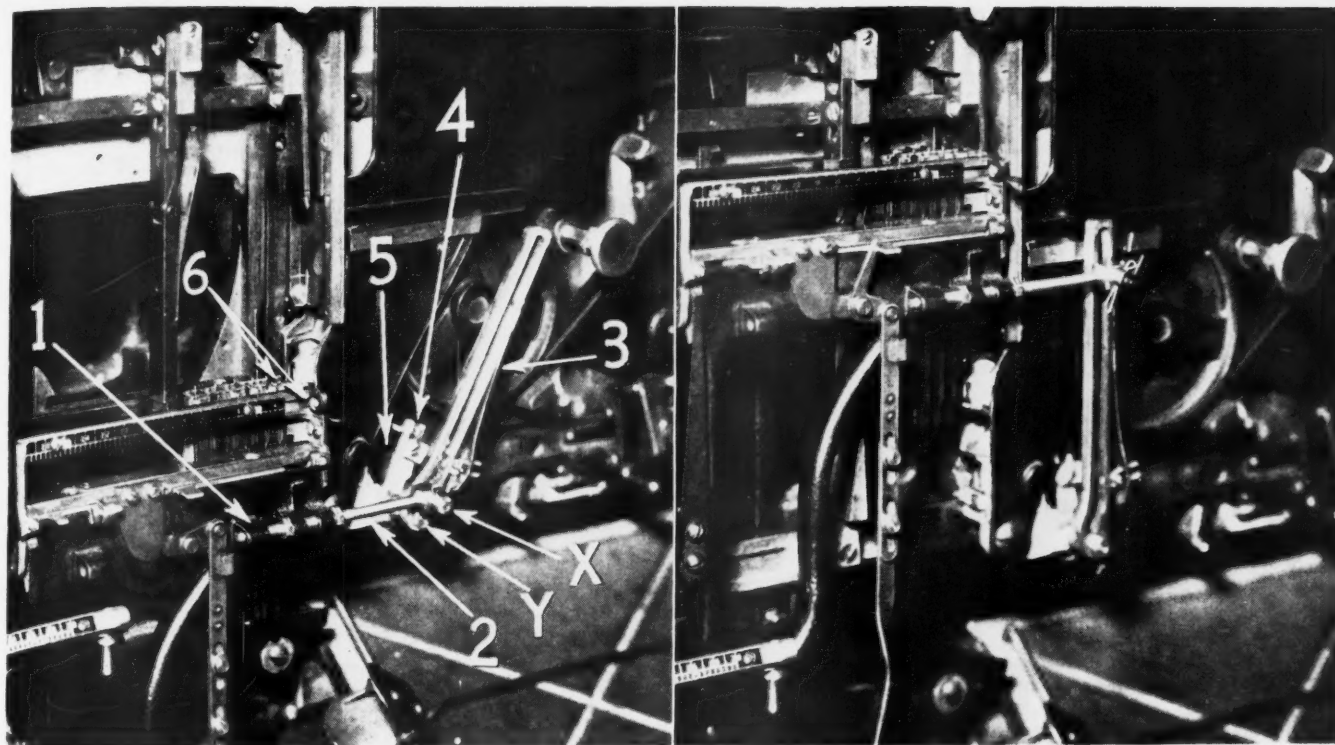
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ic issue



View of Linotype Teletypesetter-operated assembler mechanism equipped with Powers matrix push bar device in plant of the Burlington (Vt.) Free Press. This device automatically pushes the last right-hand matrix to an upright position within the assembling elevator back rail and gate pawls 6 when the elevator 1 starts to raise to delivery slide position.

In the accompanying illustration, 1 is the assembling elevator, 2 is a horizontal shaft extending to the right of the assembling elevator. This shaft is mounted in the usual brackets provided for manually operated duplex rail lever shaft. The operating shaft 2 causes the cam lever 3 to move in a sector of a circle to the left. A pin or stud (not shown) on push bar lever 4, also pivoted on stud y just behind cam lever 3, is engaged by cam lever 3 causing the matrix push bar 5 to move to the left to push the out-hanging matrix to a vertical position within the assembling elevator pawls. The push bar 5 is rectangular in shape and is fitted with a small inset brass roller at the end which

contacts the out-hanging matrix. An aperture is cut through the assembler chute rail block to permit insertion of the push bar.

After the delivery slide has conveyed the matrix line into the delivery channel, the assembling elevator, of course, drops down to normal position. In returning to normal position, the elevator reverses the movement of the matrix push bar to retract it to its position underneath the assembler chute rail springs where it will not interfere with the free passage of matrices passing through the chute during assembly of the next succeeding matrix line.

Suitable spring overthrow and lug connections are provided in the mechanism so that in case of a mechanical interference of any kind, no damage will result to the parts.

In the view at the right the assembling elevator has been raised to delivery slide position. Note that the cam lever (3 in the left-hand photo) has been moved to vertical position.

For further information about the Lawrence Copyfitter write to Lawrence Engineering Service direct, or in care of *Printing Equipment Engineer*.

## Equipment and Supplies Notes

### Copyfitting Slide Rule

ACCORDING to the sponsor, printer's copyfitting problems can be solved by a single instrument which can be used by both printer and layman. The Lawrence Copyfitter has many copyfitting applications. Among the more common problems solved with one setting of the copyfitter are: Type size and face to set a given number of characters in a given space; Number of characters of any size and face that can be set in a given space; Number and measure of lines for any number of characters and

size and style of type; Characters per pica of any type size and face from alphabet lengths; Converts Pica or Elite type-written copy to any type face and size and the like.

Graduations on the scale are expressed in printer's terms like picas, length of line to be set in picas, alphabet length in picas, and characters per pica.

The instrument, it is claimed, will work with any type size or face, with or without leading, upper or lower case, and has adequate capacity for newspaper work.



Miniature illustration of Lawrence Copyfitting Slide Rule. Is used for fitting copy into any space with any size type face, leaded or unlead.

### Printed Radio for FM Broadcasters

IN THE May issue of *Printing Equipment Engineer* was announced two new Finch Facsimile models for transmission and reception of messages including photos, layouts and proofs, written material, pictures, sketches, maps, drawings and printed matter.

Now new facsimile equipment designed primarily for FM broadcasters has been announced by W.G.H. Finch, President of Finch Telecommunications, Inc. Chief among these is the new complete Finch Broadcast studio facsimile transmitter-monitor system shown in the accompanying illustration. It consists of two Finch broadcast facsimile scanners, each with associated monitor receiver, power units, amplifiers and selective switching arrangements for insuring uninterrupted transmission for any number of facsimile pages.



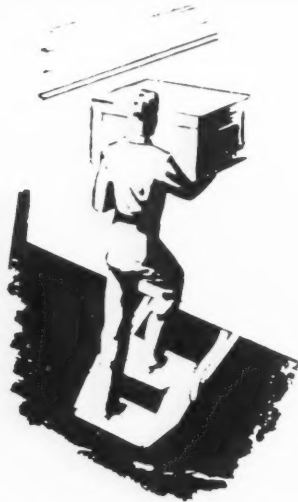
View of Finch "Printed Radio" Facsimile broadcast studio transmitter-monitor for FM broadcasters.

Provided with Finch automatic copy loading and ejection it also includes a receiver operating on the outgoing signal of the unit, thus making it possible to observe the program. Two scanning units are supplied with control console to facilitate uninterrupted flow of news programs to homes, thus making it possible to start a new page as soon as the preceding page has been transmitted. Switching is provided for, enabling the operator to control both scanning units. Amplifiers and power units are furnished so that the output signal of the installation may be handled by the master control desk in the same manner as the output of a studio.

FM Broadcasters soon to install Finch Facsimile apparatus are: WMGM—New York, N. Y.; WGHF—New York, N. Y.; KMGM—Hollywood, Calif.; KJBS—San Francisco, Calif.; WJJD—Chicago, Ill., the San Bernardino Broadcasting Co., San Bernardino, Calif., and Western Reserve Broadcasting Co., Cleveland, O.

#### Folding Steps For Trucks

**Q**UICK-ACTING folding step for trucks and trailers, have been announced by Safety Step Co. These steps are designed for use on flat racks, stake bodies, vans, trailers and semi-



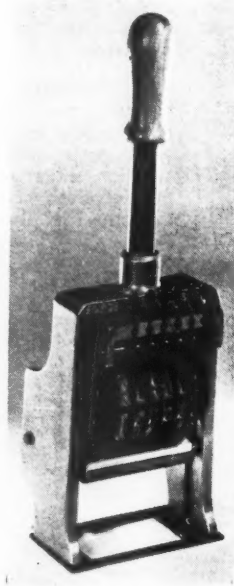
trailers. The steps may be mounted in center or at either side. In closed position the steps fold under the truck bed. When the trip is manually operated, two 16 in. steps swing down and look in open posi-

tion. A lift and push swings and folds the steps back under the truck bed where they are automatically locked in closed position. Another style, 13 $\frac{1}{4}$  in. deep, is designed for side or "tight spot" mounting.

Saf-T-Steps are all metal and are built to support a weight of 1000 lbs. They weigh 40 lbs.

#### Force Case Numberer

**W**M. A. FORCE & COMPANY announces an improved model of its Case Numberer which is now in production. The new unit utilizes impregnated plastic for the wheels with aluminum for other major structural



Force Case Numberer prints on wood or carton board.

parts, making a lighter and easier handled unit. The plastic composition utilized is a cloth-impregnated phenolic highly resistant to the chemicals used in the special inks necessary because of the rubber characters which enable the machine to print uniformly and clearly on wood or carton board.

#### Exposure Meter For Use With ASA Film-Rating System

**P**RODUCTION of a modified form of the General Electric DW-58 exposure meter, which incorporates the new American Standards Association (ASA) exposure-index numbers, has been announced by the Meter and Instrument Division of the General Electric Company.

General Electric has made this change in the interest of standardization and is adopting the new, improved film-rating

system developed by the American Standards Association. This system is also being adopted by all the nation's leading film manufacturers for all classes of users, and it was used by all photo units of both the Army and the Navy during the war.

The numbers in the ASA system are so arranged that they are close enough to permit their use with all previous model G-E exposure meters with the



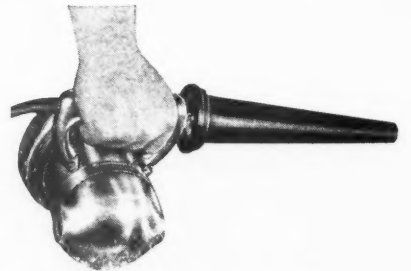
minimum amount of difficulty. This meter has the same instrument mechanism as the DW-58 meter recently announced by the Company except for the dial on the front.

#### New Model Electric Blower

**A**N improvement in the design of electric blowers, for blowing dust, dirt and lint from motors, machinery, etc., is announced by the Breuer Electric Mfg. Co.

Basic features of design of this model No. 46, are said to include: Balanced fan design, with solid, full-diameter back, which provides greater air displacement and adds strength and durability.

Screened openings, placed at strategic points around the sides of the motor



View of Model 46 Tornado Electric Blower for blowing dust, dirt and lint from motors, machinery and other equipment.

housing, permit concentration of air over the commutator and brushes, providing a more effective and larger volume of cooling air where most needed. Size of openings conforms to government specifications.

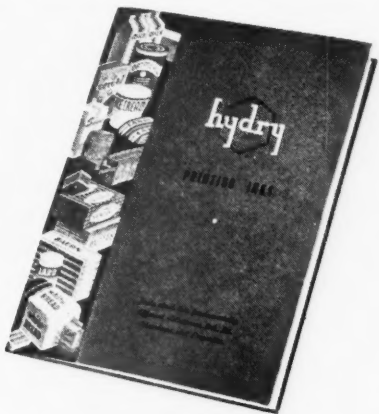
Improved switch, installed at end of handle, gives better balance and pro-

vides easier operation. Toggle switch is located for easy thumb access.

Unit is equipped with a  $\frac{1}{2}$  h.p. G.E. universal motor, with sealed ball bearings that require no subsequent lubrication. Further details may be secured on request.

### Hydry Booklet

An illustrated brochure, 8 $\frac{3}{4}$  in. by 11 $\frac{1}{4}$  in., 16 pages and cover, has been published by General Printing Ink Co., Div. of Sun Chemical Corp. The brochure is entitled *Hydry Printing Inks*. In the booklet appears a discussion of the purposes and utilities of Hydry Moisture-set printing inks. Not-too-technical in-



Miniature reproduction of brochure published by General Printing Ink Co., Div. of Sun Chemical Corp., in which is illustrated and described in not-too-technical language the utilities and purposes of Hydry Moisture-set inks for packaging and food wrapper printing.

formation is included. Manufacturer states: "Because of the odorless, quick-setting characteristics of Hydry ink, one of the important fields for these inks is the food packaging and wrapping industry." William G. Forster is in charge of the development of the Hydry program. The original work on the development in the use of Hydry ink was performed by Michigan Research Laboratories, Inc., a subsidiary of Sun Chemical Corp.

A copy of the brochure may be obtained by writing to General Printing Ink Co., 100 Sixth Ave., New York 13, N. Y., or any office of the GPI Divisions.

### Publishes Catalog No. 18-A

The Challenge Machinery Co. has published illustrated catalog No. 18-A entitled *Challenge Printing Machinery and Equipment*. Size of book is 8 $\frac{1}{2}$  in. by 11 in. In the catalog are illustrated and described Challenge drilling machines, paper cutters, presses, quoins and keys, galleys and cabinets, iron furniture, plate-mounting equipment and miscellaneous equipment consisting of imposing surfaces, routers, type-high units and punches. The catalog is thumbpinned for convenience in referring to each of a number of separate sections ranging from A to H.

### Demonstrates Facsimile Equipment

**D**URING the convention of the American Newspaper Publishers Association at the Waldorf-Astoria, New York, during the week of April 22, Capt. W. G. H. Finch, president of Finch Telecommunications, Inc., discussed and demonstrated Facsimile Printed Radio.

Captain Finch owns the new FM-facsimile station WGHF in New York. It operates on 99.7 megacycles. He demonstrated to ANPA members the radio transmission and reception of a 4 page newspaper transmitted from Station WGHF at 10 East 40th St., New York, to the convention floor.

The 4 page illustrated paper called *Airpress*, each page 8 $\frac{1}{2}$  in. by 11 in., took 8 min. to run off. The high-speed high-definition facsimile home unit produced the copy at a speed of 44 ss. in. of picture copy or 550 words per min. using 8 pt. type.

### Lawson Appointed Distributors

Melville C. Cole, President of the Southworth Machine Co., Portland, Me., has announced that the E. P. Lawson Co., Inc., New York, has been appointed exclusive distributors for Southworth products in 15 northeastern and middle Atlantic states.

According to the announcement by Mr. Cole, the agreement between the two companies covers the Southworth

line of punching machines of all types, mechanical binding attachments, tab and index Cutting equipment, round corner cutters as well as Southworth Universal Joggers. The sale of Simplex paper conditioners, Holdfast hangers and Southworth humidifiers was not included in this distributorship.

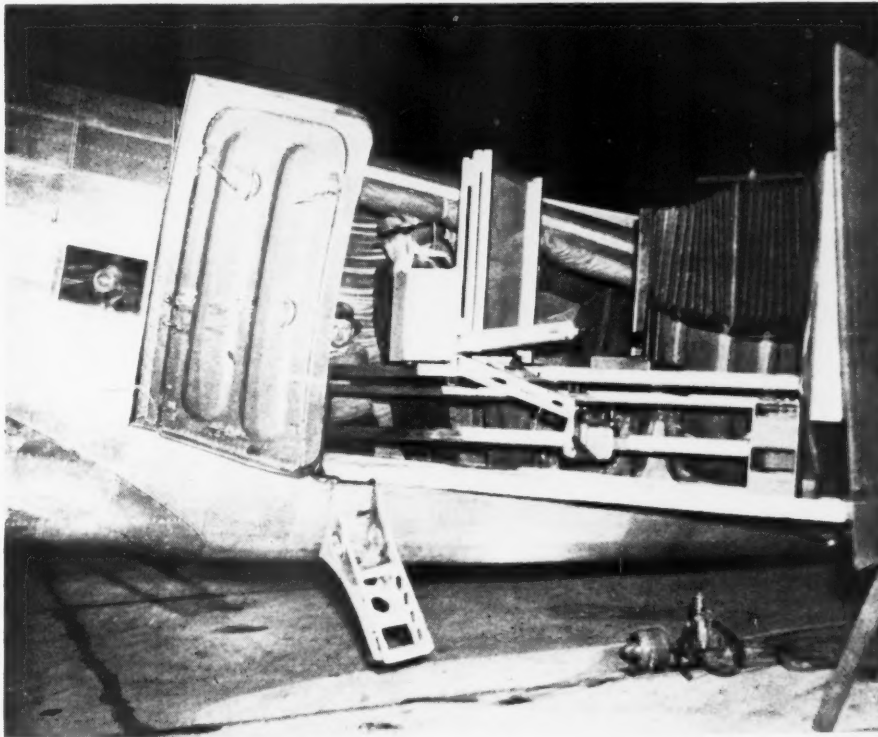
### Seybold Heads Lawson Research

A research department to solve the problems of paper cutter users was set up in June by E. P. Lawson Co., Inc., manufacturers of paper cutting and



Fred Seybold heads Lawson research.

bindery equipment, according to David W. Schulkind, president. The new department is under the supervision of Fred Seybold, chief engineer. Assisting him, and in direct charge of the new research department is Frank Cade, service manager.



This photo-engraving camera was lashed to the floor of a Flying Tiger airplane out of Chicago and was flown to the North Hollywood (Calif.) *Valley Times* early in June, without benefit of crates of any kind. It was shipped by Consolidated Photo-Engravers Equipment Co., Chicago. Jack Wigle, Superintendent of the *Valley Times* photo-engraving department, reports the camera is capable of reproducing a full page of pictures at one time. This semi-automatic camera is said to be the first of its kind to go into operation on the West coast. The plane left the Chicago field at 1 o'clock in the morning and arrived in Hollywood at 1 o'clock the next afternoon.

# Planning Printing Plant *is never out of order — even in face of present building lull — Some things you can do until lifting of building ban*

By **ROBT. W. DICKERSON\***

*\*Architect and Engineer, Cleveland, Ohio*

**T**HE Presidential directive which, on March 26th, flashed a red light in the path of the building industry brought to a halt the greatest potential construction program this country has ever faced. The backlog of deferred construction in every field—residential, commercial, industrial, schools, churches, hospitals, public buildings—which had been accumulating through the depression years and, later, through the war years, had been built up to incomprehensible proportions. The order brought a halt to all work upon which a bona fide start had not been made, and conditioned any further procedure upon the approval of the agencies established for its administration and enforcement.

Any accurate description of the construction halt must forego such time honored, well loved and graphic embellishments as the "scream of grinding brakes" or the "aroma of scorching tires", for the suddenness of the stop had more of the jarring abruptness of a change from the mad rush of the turtle to the breathless pace of the snail. The building industry, for which such an important role had been cast in the postwar recovery period, had attained its scarcely measurable momentum in the face of the most discouraging odds. Beset at the outset with actual shortages of almost every material required in construction, faced also with an inescapable scarcity of building mechanics, bedeviled

from the start by unpredictable labor demands, it is a tribute to the vitality and stamina of the industry that it had not already bogged down in despair. Now—the red light.

It is no part of the purpose of this discussion to argue the merits, or lack thereof, of the GI housing program, nor to question the honesty of purpose which led to its adoption. Nor is there any sound basis for predicting the probable duration of the restrictions imposed by the order. Guesses range all the way from an early falling apart from its own weight and futility, to its continuation until at least a measure of its objective is attained. The strongest probability appears to be that every effort will be made to bring it to its fullest flower of promise by presidential election time. Whether the restraining features of the order will be "softened" or made more stringent remains, likewise, unpredictable. There are promises and threats in both directions.

Whatever the outcome may be, the present situation is one which touches the interests of a great many printers and publishers. No small part of the plant improvement program which faced the construction industry was that which they had accumulated during the years when improvements in facilities had been held to the level of bare maintenance. Long before the end of the war many of them had plant improvement

plans well advanced, and their orders for new equipment were on the books of the manufacturers. The manufacturers, too, had had their problems in converting from war operations to their normal production but, in most instances, the order of March 26 found them with production schedules stepping up and completion and shipping dates for much equipment were close ahead. Equipment ready for delivery and building improvements not ready to receive it. Small wonder, then, that many are asking "What's the use?"—"Why go on planning?"—"Where do we go from here?"

Planning is never out of order, and time and energy expended in that direction is never wasted. Without any intention of stealing a page from the book of "Pollyanna", it may well be that this enforced pause in the consummation of improvement programs contains an element of blessing. Planning of some programs was begun early, has been carried out methodically with results that are all they might be. In other instances, due to the tremendous volume of work which was suddenly imposed upon the depleted staffs of architects and engineers, "pressure planning" has undoubtedly been done, and conclusions reached which, with more time and less pressure, could have been vastly improved. In still other instances, due either to this same lack of technical facilities, or to a lack of appreciation of the importance of planning, makeshift, interim programs have been conceived. Time gained at the expense of careful and deliberate planning is time lost. If this hiatus in the translation of plans into construction results in the review of some of the things which have been done under pressure, and in the actual planning of improvements where expediency rather than careful analysis has dictated procedure, it certainly will not be an unmixing calamity.

Those who began planning their plant improvements early, before the architects

*(Continued on Page 90)*



Graphic Arts Trade Association Executives, national organization of secretaries of Graphic Arts trade associations, held its spring meeting, May 10 and 11 in the Morrison Hotel, Chicago, Ill., for interchange of information and views regarding industry affairs. Standing in rear, center, is Joseph P. Smith, manager, Methods and Equipment Department, New York Employing Printers Association, Inc., New York, who is president of GATAE. Seated at right of center, rear, is Walter Soderstrom, secretary of the National Association of Photo-Lithographers, and vice president of GATAE. Seated on far right is Mrs. Grace H. Downing, secretary of Graphic Arts Industries, Inc., Minneapolis, and secretary-treasurer of GATAE. Seated in second row from left (front) is E. T. Engel, Cleveland. Third from Mr. Engel is R. Reid Vance, Executive Secretary Ohio Printers Federation.

# A Masterpiece of Engineering

A genuine modern day masterpiece  
--the Cottrell-Claybourn two-color  
rotary press, an example of master-  
ful engineering. This model is  
designed for any commercial printing  
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printing of catalogs, broadsides,  
folders, booklets, labels and other  
color work. The speed operation  
in plants is up to 5500 sheets per  
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operation of this press means  
**PROFIT!!!**

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Daily News Bldg., 400 W. Madison  
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Humboldt Ave., Milwaukee, Wis.  
Smyth-Horne, Ltd., 13 Bedford Row,  
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# Cottrell

FOR 91 YEARS OF GROWING WITH THE PRINTING

INDUSTRY



Left to right—Walter Cassidy, International Printing Ink; Jack Campbell, Jersey City Journal; Lowell E. Goodwin, Camden Courier-Post; V. D. Shanahan, Jersey City Journal; Wm. M. Putscher, Newark Evening News; Thomas C. Jones, Newark Evening News, and C. C. Testerman, Camden Courier-Post.

## Executives of New Jersey Hold Mechanical Conference

By JULIAN POLLAK

WITH a registration of more than 300 mechanical executives responsible for printing production, equipment and supplies in the newspaper field and an instructive program of technical discussions, the sixth annual mechanical conference of the Mechanical Division, New Jersey Press Association held Friday, Saturday and Sunday, June 14, 15 and 16, was the most successful of any of the mechanical conferences held in New Jersey. It took place in Hotel Traymore on the boardwalk in Atlantic City.

Neal E. Dyer, mechanical superintendent of the Camden (N.J.) *Courier-Post* was elected new president, succeeding George W. Holloway, mechanical superintendent of the Elizabeth (N.J.) *Daily Journal*, who held that post for four years. Elected as new vice president was Donell F. Shortell, mechanical superintendent of the Asbury Park (N.J.) *Press*, succeeding Thomas Jones of the Newark (N.J.) *Evening News*. William C. Rolle,

press foreman of the Newark *News*, is the new secretary-treasurer. He succeeds Frank J. Frisch, mechanical superintendent of the Plainfield (N.J.) *Courier-News*.

A rising vote of thanks was given Mr. Holloway for his leadership of the mechanical division during the past four terms, after Rudolph E. Lent of the Jersey *Journal*, Jersey City (N.J.) praised the qualities of Mr. Holloway and his efforts to make the conference successful.

The opening session, Saturday at 10 a.m. was called to order by Mr. Holloway. An address of welcome was made by Monroe L. Mendelsohn, business manager of the Atlantic City Press-Union Pub. Co. and Thomas C. Summerill, president of the association and publisher of the Penns Grove (N.J.) *Record*, responded on behalf of the association.

In the evening a dinner was held. Mr. Summerill acted as toastmaster. The only speaker was George Dixon, Wash-



Retiring and new president of New Jersey Mechanical Conference at NJPA Meeting in Atlantic City. Left to right, George W. Holloway, past president; Thomas C. Summerill, NJPA president and publisher Penns Grove *Record*; Neal E. Dyer, new Mechanical Conference President and mechanical superintendent Camden *Courier-Post*.

ington columnist of King Features Syndicate.

### Line-Composing Machine Improvements

John T. Arnold, mechanical superintendent of the New Brunswick (N.J.) *Home News*, presided at the Machinist's Clinic. H. R. Freund, chief engineer of Intertype Corporation speaking on *Post-War Predictions Realized* told of the latest developments in the Intertype.

Mr. Freund discussed improvements in line-casting machines developed since the war. His firm had on display a matrix magazine called Visilite with plexiglas top and aluminum bottom. The transparent top makes it possible for the operator to observe movement of the mats inside thereby cutting down mechanical difficulties. The new magazine is easier to handle. It weighs 22 lbs. (empty) as compared to the 57 lb. brass magazine, or the all-aluminum one weighing 33 lbs.

The aluminum bottom plates are anodized. This treatment is claimed to harden the surface and makes them corrosion-resistant.

Another development which was brought to the fore during the war was a method of deep-freezing steel. This method is now used by Intertype in the manufacture of molds and trimming knives which results in less warpage of these parts.

"And while we are discussing molds," said Mr. Freund, "I would like to call your attention to the Penetrating Process we use in their treatment. Sometime ago we adopted this process to improve the appearance of our molds and to make these molds rust-resistant. We discovered it also resisted metal adhesions. In other words, the molds kept free from hard ejection and required cleaning after months of continued use. The effect of this Penetrating process did wear off eventually. It was then we discovered the Penetrating process also had a cleaning effect on molds. Penetrating must be done by competent operators.

Helpful suggestions for machinists were offered by E. C. Jorgensen, service engineer of Mergenthaler Linotype Co. He discussed the improved engineering of the Linotype, easier operation, added flexibility, increased versatility and also outlined briefly the new plastic matrix. Luncheon followed the clinic.

The Engraving and Electrotyping Clinic opened the afternoon session with Maurice A. Hagan, engraving superintendent of the Philadelphia *Inquirer*, presiding. Mr. Hagan referred briefly to the current problems of private engraving plants. *Photo-Engraving Cost Problems of Today* was the subject of a talk by Stanley W. Myers, assistant mechanical superintendent of the Philadelphia *Bulletin*. He spoke of art and engraving and related how perfection can be accomplished despite poor copy. Robert H. Roth, mechanical superintendent of the Atlantic Electrotype and Stereotype Co. gave hints on how to get good mats and electros and also submitted a report on a recent poll made by electrotypers.



# VALUE

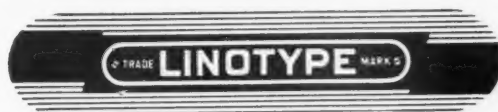
*The value of a thing is  
the amount of laboring  
or work that it will save  
its possessor*

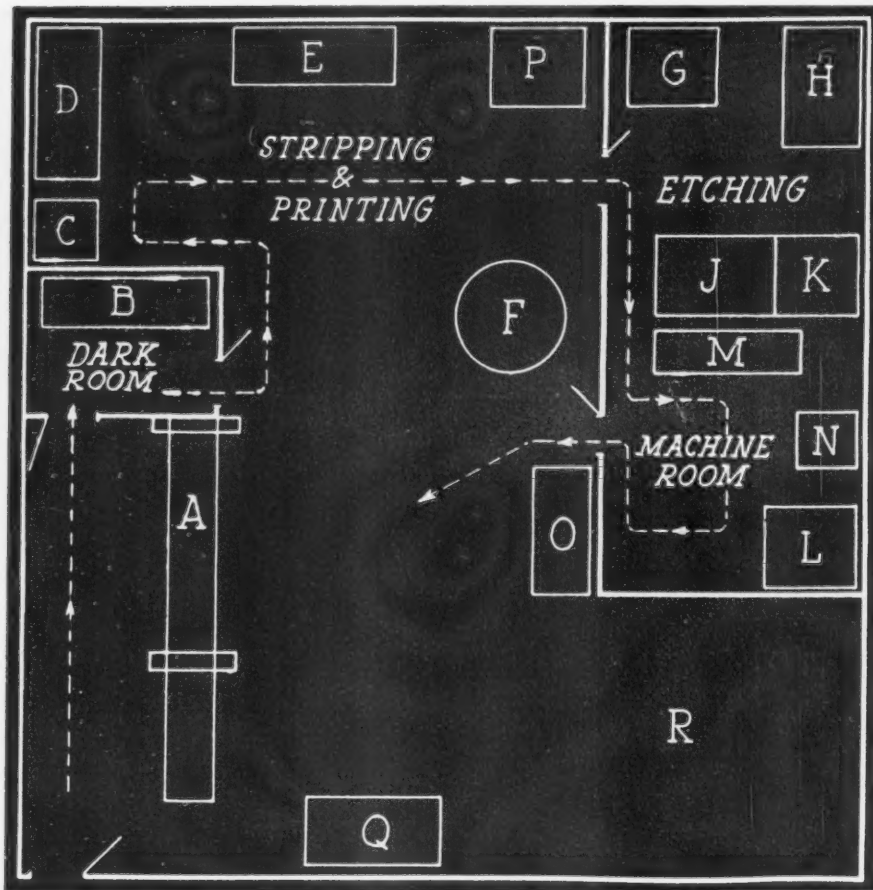
Throughout sixty Linotype years, the value to its owner has far excelled all claims made for every Linotype. Today, by any standard, *Blue Streak Linotypes* are the finest in design, construction and performance.

Pride of ownership is universal evidence of the *value* which has been proven in so many plants.

See your Linotype Production Engineer—he has technical composing room information of value to you.

LINOTYPE · 29 RYERSON STREET · BROOKLYN 5, N. Y.





**Newspaper Photo-engraving Plant Layout** — In this diagram (not drawn to scale) is shown a newspaper photo-engraving plant, laid out in a floor area, 25 ft. by 25 ft. The diagram was suggested by Elmer C. Aslinger, Production Manager, the Greensboro (N.C.) *News*. The arrows indicate the direction work is moved through the department. Similar plans can be made to fit other types of space provided the general idea of keeping the work in line is accomplished.

The equipment is itemized as follows:

- |                        |                   |
|------------------------|-------------------|
| A—Camera               | J—Etching machine |
| B—Darkroom sink        | K—Sink            |
| C—Stripping sink       | L—Router          |
| D—Stripping table      | M—Guillotine      |
| E—Double printing sink | N—Saw             |
| F—Plate whirler        | O—Proof press     |
| G—Powder box           | P—Printing frame  |
| H—Stove and cooler     | Q—Foreman's desk  |
|                        | R—Stock space     |

#### Four Color Newspaper Ads 10 Years Away

Don. F. Shortell, mechanical superintendent of the *Asbury Park Press*, presided at the Pressroom and Color Clinic. *Color Printing in Newspapers* was the subject of a talk by William B. Pape, assistant publisher of the *Waterbury (Conn.) American and Republican*. Mr. Pape reported there is now a slight trend toward the use of color in newspaper advertising, but said that black is still "most effective."

"It's an interesting experiment" he observed, "but it won't pay for some time to come. There is a tremendous difference in the rates between black and color advertising and the newspapers are not being stormed for color. Advertisers find black and white the most effective, and it will continue that way for years."

Mr. Pape said that only 10 to 15 per cent of the dailies are now equipped to

print advertising in colors. He pointed out that such leading newspapers as the *New York Times*, the *New York Herald Tribune*, the *New York Sun* and the *New York Daily News* continue to appear in black and white only. He predicted it will be at least 10 years before advertisements in four colors become general in newspapers—and then only in cities with populations upward of 250,000.

General pressroom problems were discussed by W. E. Wines, manager of the Mechanical Department ANPA. His advice dealt with making better use of the present equipment.

C. H. Archibald, stereotype superintendent of the *Plainfield (N.J.) Courier-News*, presided at the Stereotyping Clinic. The principal talk was given by William F. Grenier, general manager of the *New England Newspaper Supply Company*.

The Composing Room Clinic with Frank J. Frisch, mechanical superin-

tendent of the *Plainfield Courier-News*, closed the conference.

#### "Nothing Complicated About Composing Room Layout"

Speaking on *Composing Room Management* E. A. Damon, merchandising manager of American Type Founders Sales Corporation gave hints on elimination of obstacles and bottlenecks in the composing room.

"You know there is nothing complicated about making a good layout. When you come right down to the actual location of the equipment, the matter is really quite simple," he declared. "Good equipment and a workable layout," he said, "are needed for an efficient and smooth working composing room. Printers in general are beginning to realize that the composing room can be a profitable department; in fact, should be a profitable department."

The concluding talk was given by Edward O. Davies, mechanical superintendent of the *Harrisburg (Pa.) Patriot-News*. He cited the need of co-operation of all departments and urged the establishment of a dispatch room.

"Our composing room must be kept on its toes," he declared. "It must be constantly on the search for quicker and better methods of production."

He stressed the need of keeping some simple system to know exactly what operations cost. He added: "If by chance we are called into the business office to explain why operating costs are high, we do not have to deal in generalities, but can not only explain, but be in a position to show just how, where and why the operations are apparently out of line."

### MATERIALS HANDLING

This book by Harry E. Stocker is of vital interest to mechanical and production executives in printing and publishing plants. While not written specifically as a treatise on materials handling in the printing plant, yet a great deal of its text will be of value in the handling of materials in the plant and outgoing shipments from the plant.

Bound in light buckram, 309 pages, many illustrations, size 6 in. by 9¼ in. Price \$5.00 per copy, cash with order.

### PRINTING EQUIPMENT ENGINEER

1276 West Third St.  
Cleveland 13, Ohio

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One of the printer's toughest problems today is how to increase printing speeds and at the same time maintain the increasingly high standard of quality demanded by his customers.

There is one sure way to step up press speeds and still hold to operating precision; that is by the inclusion of Timken Tapered Roller Bearings in your new or revised designs.

Apply Timken Bearings primarily to all plate and impression cylinders. By doing so you will eliminate all friction at these vital points and assure fast, smooth operation. More important still, Timken Bearings hold the cylinders in correct and constant alignment and protect them against radial, thrust and combined loads, thus increasing and maintaining press accuracy and thereby the quality of the product.

Every Timken Bearing has the trademark "TIMKEN" stamped on cup and cone. This is your guide to superior bearing performance. Look for it. The Timken Roller Bearing Company, Canton 6, Ohio.



## Hale Discusses Some Newspaper Problems

**H**ARRY HALE, Production Manager of the Portland (Ore.) *Oregonian*, participated in a speaking program conducted by the Oregon chapter of the American Association of Advertising Agencies, held June 18 at the Mulnomah hotel in Portland. Those who have anything to do with the design and manufacture of newspaper advertising plates or mats always benefit by attending meetings of this type. Such educational meetings as the one mentioned above are needed urgently throughout the country.

Abstracts from Mr. Hale's discussion are as follows:

Mr. Hale was asked: "Would particular proportions or shapes assist in overcoming makeup problems and allow more advertising to be run?" He said agencies could overcome some problems by having their layout men furnish more

exact layouts so that when the cuts do arrive they would drop into place. Many times we spend 5 to 20 min. revamping the page or space, as we are forced to cut the engravings down to size or rout them apart, rearrange the type, etc. This slows makeup. Particular proportions or shapes would not allow more advertisements to be run. It is well to remember that type matter set at many angles does make for considerable time work in the composing room. What really does slow us down is too many revisions, too many proofs, too many changes in the makeup of ads. The gem of them all is to have the entire ad reset in a different type face than that originally specified. Get in your copy early so that we can get you into the first edition, as neither you nor we like blank space in the paper.

Another question presented to the

speaker with the answer is as follows: "Are mats coming to you and to the *Journal* from local agencies in proper quality to assure best reproduction, and would it simplify your job of giving best results if agencies furnished electrotypes wherever possible?" Cuts, mats, and electros have been of very poor quality the last two or three years, due no doubt to the shortage of labor and material. Then, too, price and quantity of mats ordered enter into the picture. Some of the mats received lately look as though they were several generations removed from the original photo-engravings. Neither a mat nor an electro can be better than the original from which it was made. Generally speaking, the quality of electros received has been better than that of the mats. The poor cut, mat and electro problem is not local, it is national. While you may have a fine, glossy proof made of your engraving or electro with stiff ink on a proof press, it does not necessarily follow you will get a like result in the newspaper. Remember, we make a mat from which we cast a curved plate, which in turn is put on the press and printed on newsprint. Thus you see we are twice away from the original before we start to print.

With respect to r.o.p. color printing, Mr. Hale said: "It will perhaps be some time before we accept color advertisements, probably not until new presses are installed in our new building. When that time comes I am sure we will again issue complete data relating to plates, proofs, colors, and, of course, deadlines."

### Conference Dates

**ANPA Mechanical Conference**—William Penn Hotel, Pittsburgh, August 5, 6 and 7, 1946. Worth Coutney, Chairman; Walter E. Wines, Manager, ANPA Mechanical Dept., 370 Lexington Ave., New York 17, N. Y.

**Great Lakes Mechanical Conference**—Hotel Claypool, Indianapolis, Ind., October 27, 28 and 29. George Fuller, President, Stereotype Supt., Cleveland Press; Al Oberg, Secretary, Comp. Room Supt., Flint (Mich.) *Journal*.

**Illinois Newspaper Mechanical Conference**—Waukegan, Ill., Saturday and Sunday, September 14 and 15. President, Clarence R. Sneath, Superintendent, Waukegan (Ill.) *News-Sun*; Secretary-Treasurer, Howard Colton, Pressroom Foreman, Bloomington (Ill.) *Pantagraph*.

**International Association of Printing House Craftsmen**—Mount Royal Hotel, Montreal, Canada, Sept. 9, 10, 11. H. Guy Bradley, President, 5480 N. Illinois St., Indianapolis 8, Ind.; Herbert Threlfall, Secretary, 55 Pine St., Providence 3, R. I.

**International Trade Composition Association**—Atlantic City, N. J., Sept. 19, 20 and 21. Lester A. Neumann, President; Frank M. Sherman, Executive Secretary, 526 Chestnut St., Philadelphia 6, Pa.

**National Association of Photo Lithographers**—Shoreham Hotel, Washington, D. C. October 3, 4 and 5. Walter Soderstrom, Executive Secretary, 1776 Broadway, New York 19, N. Y.

**National Printing Equipment Association**—Hotel Traymore, Atlantic City, N. J., Monday and Tuesday, Sept. 9 and 10. James E. Bennet, Secretary, 140 Nassau St., New York 7, New York.

**New England Mechanical Conference**—Hotel Statler, Boston, Mass., Oct. 5 and 6. George L. Green, President, Providence (R.I.) *Journal*; Walter C. Crighton, Secretary-Treasurer, New London (Conn.) *Day*.

**Northwest Mechanical Conference**—President, Wm. C. Brown, Mechanical Supt., Minneapolis (Minn.) *Star-Journal*; Vernon Eck, Secretary, 3725 48th Ave. S., Minneapolis 6, Minn.

**PNPA Newspaper Mechanical Conference**—Wm. N. Hardy, Mgr., Pennsylvania Newspaper Publishers' Assoc., 209 Telegraph Bldg., Harrisburg, Pa.

**Printing Industry of America**—Traymore Hotel, Atlantic City, N. J., September 9 through 12, 1946. James R. Brackett, General Manager, 719 Fifteenth St., N. W., Washington 5, D. C.

**SNPA (Eastern Div.) Mechanical Conference**—George Washington Hotel, Jacksonville, Fla. September 2, 3 and 4. C. Frank Mann, Chairman of the Mechanical Committee, c/o *Courier-Journal* and *Times*, Louisville, Ky.; Walter C. Johnson, Manager SNPA, P. O. Box 1569, Chattanooga 1, Tenn. Harvey R. Capps, Chairman of Jacksonville Conference Committee.

**SNPA (Western Division) Mechanical Conference**—Texas Hotel, Fort Worth, Tex., Monday and Tuesday, August 19 and 20. Chairman, C. W. Washburn, *News-Tribune*, Galveston, Tex. Secretary, C. W. Tabb, 723 Texas Bank Bldg., Dallas, Tex.

### PIA to Cooperate

Printing Industry of America, Inc., trade association for the commercial printing industry, has announced that arrangements have been made with the U. S. Public Printer for consultations looking toward the establishment of procedures which will enable the commercial printing industry better to take care of government printing needs. The step was taken in connection with announcement by the Public Printer that the Government Printing Office has taken over the operation of duplicating and distributing plants of the Treasury Department, Procurement Division, effective July 1, 1946. This means that the Public Printer will operate these plants in Boston, New York, Philadelphia, Atlanta, Cleveland, Cincinnati, Chicago, Fort Worth, Dallas, Kansas City, Denver, San Francisco, Los Angeles, Seattle and Washington.

In connection with the announcement of the transfer of operation from the Treasury Department, the Public Printer stated that he was having considerable difficulty in satisfying urgent demands from various departments and agencies when he attempted to place such printing with commercial printers. He said that curtailment of government printing activities depended upon demonstration that surplus government printing can be handled satisfactorily by commercial printers.

2 out of 3

USE HERRICK  
NEWS INKS



16th ANNUAL AYER TYPOGRAPHIC COMPETITION

DURHAM (N. C.) HERALD  
and  
RUTLAND (VT.) HERALD  
Win Ayer Honorable Mention Awards  
in 10,000 to 50,000 Circulation Group

When publishers decide to improve their methods for a better-looking newspaper, they consider everything — paper, type, make-up, press-work, and ink — on the basis of excellence. They know that no single factor can be overlooked. For real improvement, they choose a combination of the best of each. For with daily readers as well as contest judges, it's the total effect that counts — an attractive, well-printed paper.

When the *Durham Herald* and the *Rutland Herald* selected Herrick News Inks, Herrick representatives made a study of conditions in each pressroom and formulated an ink to meet the individual needs of each publication. Every shipment of Herrick Ink is prepared in accordance with the selected formula. All shipments are uniform for unvarying press results.

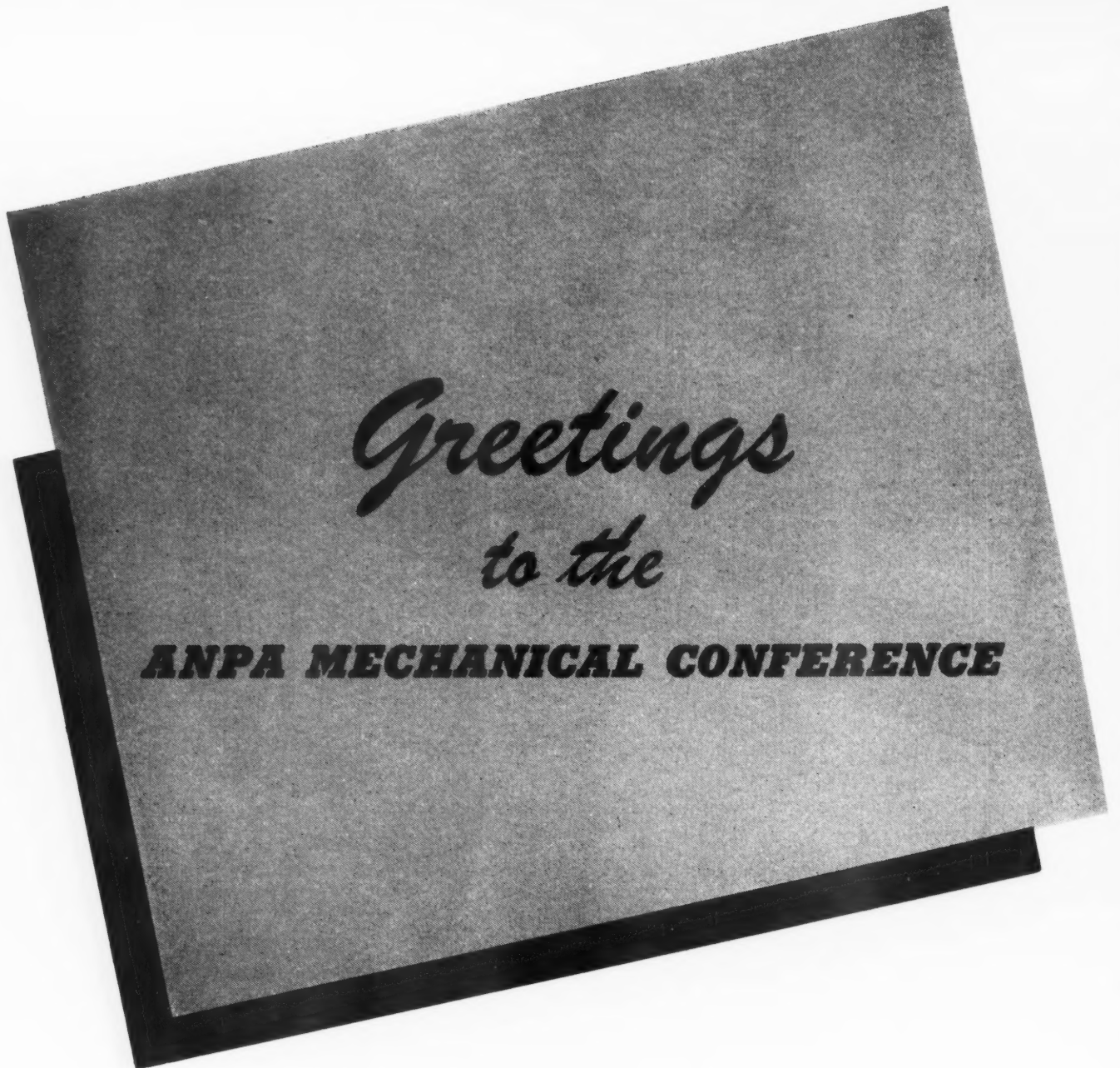
Why not try  
"made-to-order"  
Herrick Inks yourself?



**William C. Herrick Ink Co., Inc.**

Main Office & Plant

EAST RUTHERFORD • NEW JERSEY



*Greetings  
to the*

**ANPA MECHANICAL CONFERENCE**

● We of the New England Newspaper Supply Company wish to extend sincere greetings to the mechanical executives in attendance at the A.N.P.A. Mechanical Conference. In spite of the many production and material difficulties that has beset us in these trying times, it is our hope that by late August or early September we will have our production back to something like normal, then we can again supply you with your every requirement in New England blankets.

*"For better blankets use originals not imitations."*

**NEW ENGLAND NEWSPAPER SUPPLY CO.**

164 FREMONT STREET

WORCESTER, MASS.

BRANCH OFFICES

NEW YORK CITY.....	230 West 41st Street
CHICAGO, ILLINOIS.....	1950 Daily News Building
SAN FRANCISCO, CALIFORNIA.....	321 de Young Building
PORTLAND, OREGON.....	Oregonian Building

## Large Color Printing Press Order

WHAT is said to be the largest order of printing presses in history was placed with the R. Hoe and Co., Inc. New York, by *The American Weekly*, the Hearst magazine distributed throughout the country with a group of Sunday newspapers, it was announced in June. The contract involves \$4 million worth of color printing presses embodying modern engineering principles for high-speed, quality, letterpress printing. Standing end to end, the nine presses would occupy an area approximately 20 ft. wide by 600 ft. long and weigh almost 6 million pounds.

Building this machinery will take up a sizeable portion of R. Hoe and Co.'s manufacturing facilities at the main plant in New York, N. Y., and an auxiliary plant and foundry at Dunellen, N. J.

The contract involves a total of 270 units, made up of 216 printing couples, 18 folding machines, and 36 automatic non-stop paper roll changing and paper tensioning devices. This machinery is designed especially to meet particular color printing requirements of *The American Weekly* and its more than 8 million circulation. The presses required almost a year's joint planning by the mechanical staffs of *The American Weekly*, Hearst Consolidated Publications, and R. Hoe and Co.

The various unit components will be built into nine 24-cylinder multi-colored presses. Each press will be capable of printing 64 pages of which 48 may be in full color. Maximum operating speed will be 40,000 magazines per hour per press, slit, folded, cut, delivered and ready for distribution.

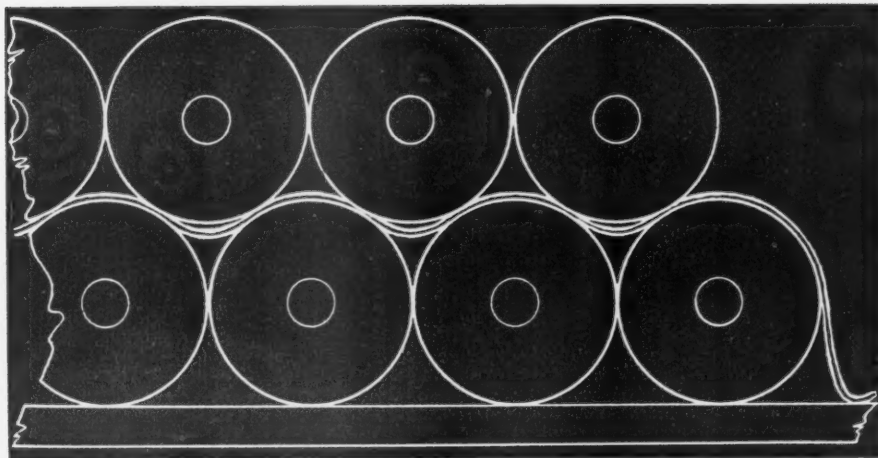
### Hoe Press Demonstration

New streamline color - convertible newspaper printing presses were described and inspected in construction by R. Hoe & Co., Inc., sales representatives at their first post-war sales convention held recently in New York, N. Y., announced Arthur Dressel, vice president and general sales manager.

"This meeting held a particular significance to our sales staff," Mr. Dressel said. "They were able to view the revamped layout of our shops, both in the Bronx and in Dunellen, N. J., which were reconverted from war production to the manufacture of printing presses."

Fifty of the new style presses are now in construction, the first battery of which probably will be installed in the late summer or early fall. Mr. Dressel said these new machines are late post-war design and include various improvements.

"The new standard black units," Mr. Dressel explained, "are pre-engineered to allow for the addition of color cylinders without changing cylinder caps, guards, or gearing. Thus publishers need not pay initially for color equipment not immediately required, but may have the knowledge that the new Hoe press is so designed that the necessary parts for any color facilities may be purchased to add to the black press parts."



## Old Plate Conveyor Belt Useful in Preventing Newsprint Roll Scuffing

ONE of the many ways in which newsprint rolls may be damaged when they are delivered to the pressroom is by scuffing of the headband when the top layer of rolls is let down to truck bed height after the rolls have been carted from warehouse to pressroom delivery point. The scuffing sometimes is deep enough so that a considerable quantity of stock is damaged, thus causing increased white waste.

Production Manager, Harold Mintun, of the Pittsburgh Post-Gazette, describes a means for preventing the scuffing of

rolls which may be damaged in unloading from the truck. The means for doing this is by simply laying two lengths of conveyor belt, approx. 12 or 18 in. inwardly from both ends of the lower layer of rolls. The upper layer of rolls then rests upon the two strips of belt. For this purpose, discarded composition plate conveyor belt is used. The belt is approx. 4 in. wide by 1/4 in. thick. Enough strip length is used to extend to the truck bed so the first roll will be lowered upon the two lengths of belt.

Production executives conducted the sales representatives through the plants where the actual manufacturing of vital parts of the presses were shown and described in detail to the men.

Those who attended the conference included: Orvis L. Grain, New England Mgr.; C. W. Dickinson, Mgr. Offset Div.; G. H. Higgins, Central States Mgr.; Ray A. Willoughby, Western States Mgr.; G. W. Petty, Canadian Rep.; F. H. Kerl, Mgr. Small Machinery Div.; Walter C. Cooper, Middle Western States Mgr.; I. J. Gutmann, Asst. to Sales Mgr.; John J. Sweeney, Southeastern States Mgr.; Leo H. Kohl, Field Service Supervisor; A. Fred Gebhard, Newspaper Press Sales Div.; G. G. Carnegie, Asst. Mgr. Offset Div.; Raul Fara, Mgr. Sales Service Div.; Wallace Burke, Magazine Press Div.; F. W. Schnell, Middle Atlantic States Manager.

### ANPA Survey

THE American Newspaper Publishers Association has retained J. W. Rockefeller, Jr. & Associates, consulting engineers, 140 Cedar St., New York, N. Y., to survey the possibilities of further research into the matter of improvement of the physical appearance of newspapers. The preliminary survey for which this firm has been engaged will cover a period of approximately six months at the end of which time a report will be submitted to the Association.

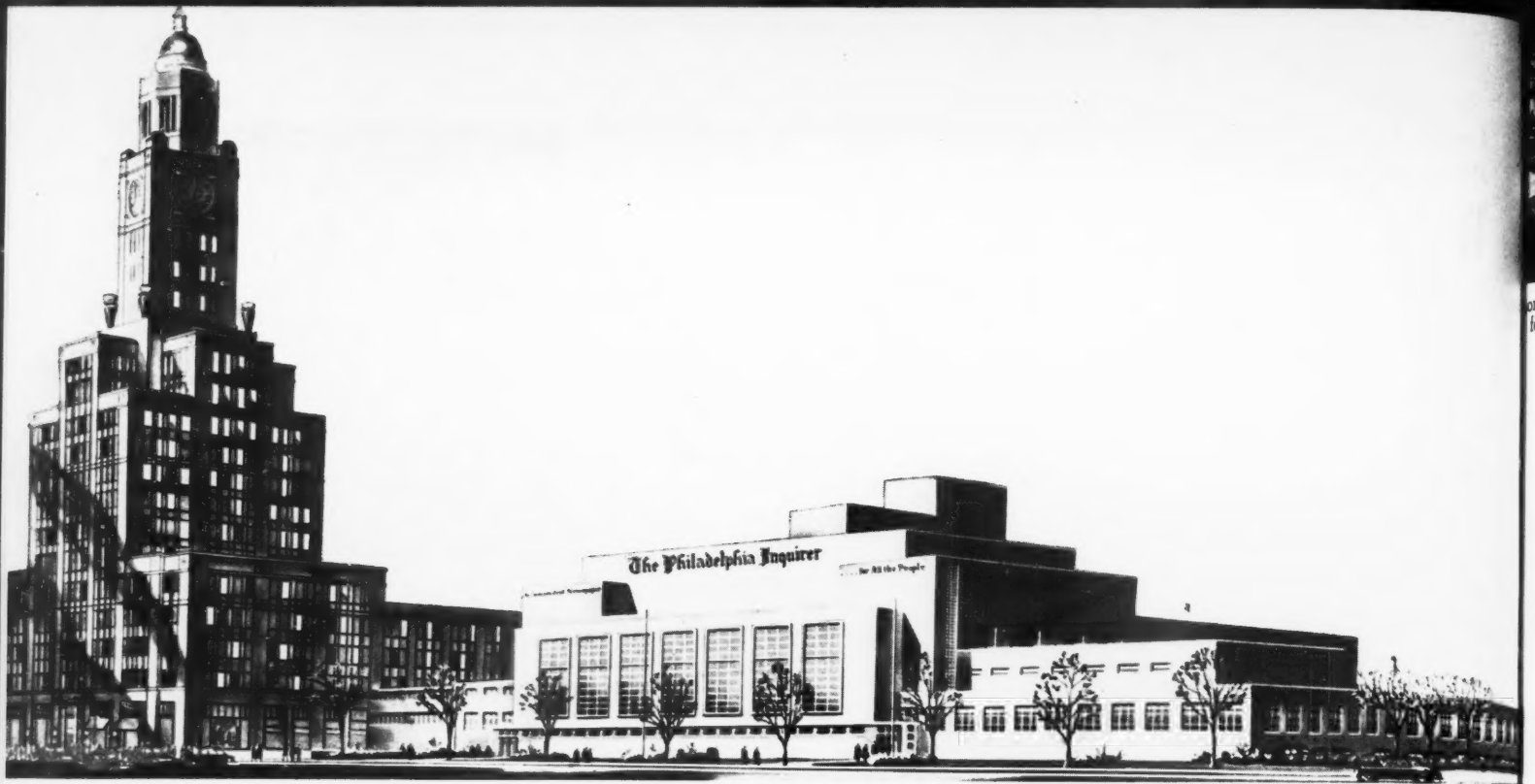
This firm has been actively engaged in the solution of problems in the printing industry in all sections of the country for the past 20 years.

Already the newspaper business has manifested a high degree of interest in this undertaking which assures a general course of research being conducted along channels which will prove of the maximum benefit to the business generally, it has been announced.

Members of the Rockefeller firm will visit publication plants in order to supplement the opinions already expressed by publishers in this connection.

### Veterans Return to Timken

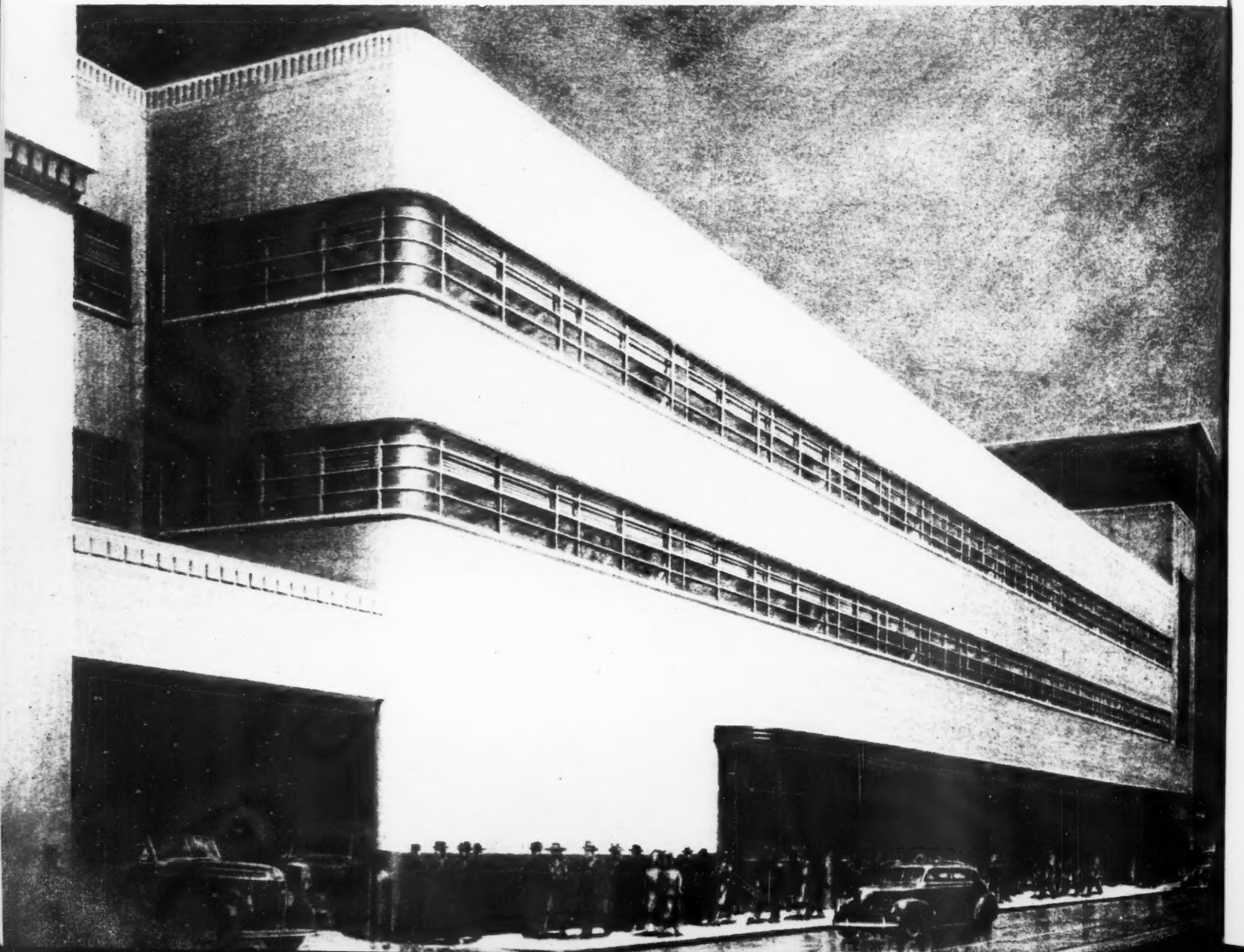
Six naval veterans and a former member of the War Production Board have recently returned to their pre-war jobs in the Industrial Div. of The Timken Roller Bearing Co., Canton, O. The veterans and their present positions are as follows: R. G. Harmon, field engineering, Chicago; D. G. Gibson, field engineering, Cincinnati; S. T. Salvage, assistant district manager, Cleveland; R. L. Williams, field engineer, Cleveland; F. J. Hartshorne, field engineer, Milwaukee; and L. M. Meyer, field engineer, Pittsburgh. L. H. Gegenheimer, the former WPB member, is now district manager of the Industrial Division in Boston.



The Philadelphia Inquirer

# *America's Largest P*

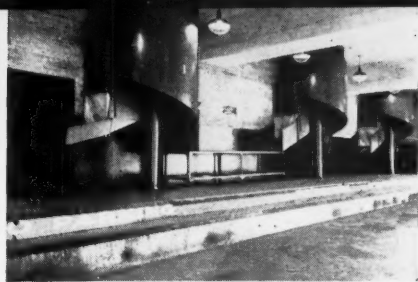
St. Louis Post Dispatch



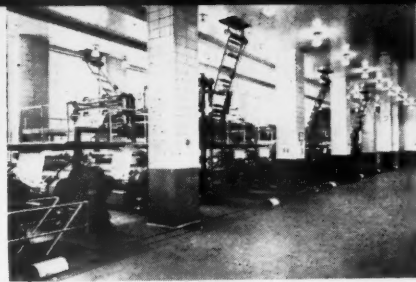




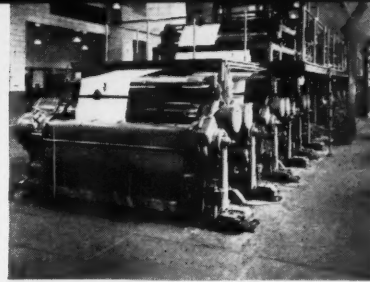
Wire Tying Machine  
feeder conveyor



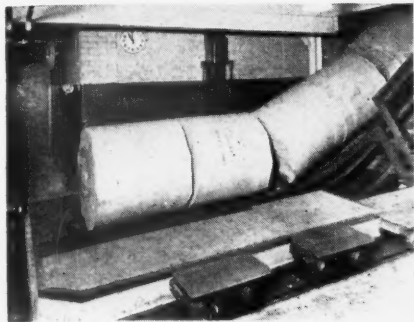
Spiral Bundle Delivery Chutes



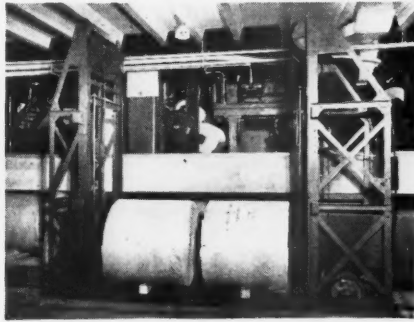
Stereotype Plate  
Conveyor System



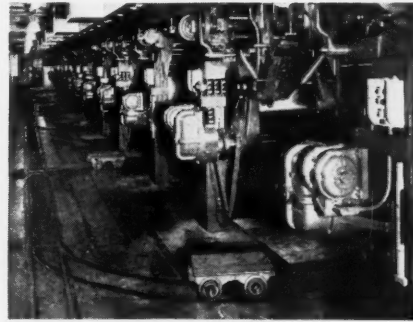
Non-slip Press Floor



Newsprint Conveyor



Newsprint Tiering Machine



Newsprint Track System

# es *Postwar Plants*

## *ADOPT THE JAMPOL METHODS of Handling Rolls of Newsprint, Stereotype Plates and Mailroom Products*

The methods adopted for the handling of rolls of newsprint, stereotype plates, and the finished newspapers, play a most important part in the laying out of a new newspaper plant.

This is why Jampol Engineers with their many years of experience have been able to render a valuable service to publishers, architects and engineers planning new buildings and expansion of present facilities.

Leading newspaper plants such as those shown on the opposite page have adopted Jampol methods and equipment to secure maximum production speed and efficiency.

Design your building around the Jampol materials handling methods.

We will gladly discuss your problems if you will write us.

## **THE JAMPOL COMPANY**

General Office & Factory, 728-742 61st St., Brooklyn 20, N.Y., Canadian Factory, Sherbrooke, Que.

When writing the advertiser please mention PRINTING EQUIPMENT *Engineer*—July 1946



**Newly Elected Officers of the New England Daily Newspaper Composing Room Executives' Association** — The meeting occurred in Keene, N. H., Saturday and Sunday, May 18 and 19. From left to right, these men are: Treasurer, Charles McGlashan, Brockton (Mass.) *Enterprise*; Vice President, Victor J. Bressett, Keene (N.H.) *Sentinel*; President, Joseph J. Mahoney, Holyoke (Mass.) *Transcript*; Secretary, Edwin A. Hutt, Keene (N.H.) *Sentinel*; Director, Henry G. Jones, Portland (Me.) *Press-Herald-Express*; Director Edward J. Cunningham, Taunton (Mass.) *Gazette*.

## *Executives* of New England newspaper composing rooms hold first postwar meeting — 100 in attendance

**N**EARLY 100 members of the New England Daily Newspaper Composing Room Executives' association, met at Hotel Ellis Keene, N. H., on Sunday, May 19. At this meeting they elected Joseph J. Mahoney, Holyoke (Mass.) *Transcript*, president to succeed Ralph Johnson of the Brockton (Mass.) *Enterprise* and *Times*.

Attendance at this first regional meeting since Pearl Harbor exceed any previous meeting, according to Edwin A. Hutt, convention committee chairman. In addition to the composing room executives, the convention was attended by representatives of the major manufacturers of printing machinery and supplies, including the Mergenthaler Linotype Co., Intertype Corp., Ludlow Typograph Co., Lanston Monotype Machine Co., Matrix Contrast Corp., American Type Founders, E. W. Blatchford Co., Imperial Type Metal Co. and Acme Type Metal Co.

Edward Betts of Brooklyn, technical adviser of the Mergenthaler Linotype Co., delivered the principal address at a dinner on *Conditions Affecting Typesetting*.

Mr. Betts, although agreeing that scientific advances will bring about some changes in printing methods and machinery, declared that present methods and machinery will undoubtedly continue for many years, and that no revolution should be expected. Plastics and photographic printing have unquestioned possibilities, he said, but emphasized that their use entails many technical difficulties such as to make them unacceptable for general use as opposed to present-day operations with typesetting machines and type metal.

Following the talk by Mr. Betts, members joined in a round-table discussion of composing room problems, led by William Madden, composing room foreman of the Worcester (Mass.) *Gazette*.

A session on Saturday night at the summer home of Victor J. Bressett at Granite Lake, Munsonville, was appreciated inasmuch after the inactive years of war emergency, members had accumulated an important backlog of technical problems, many of which were solved in the informal clinical session at Mr. Bressett's camp.

## Interim Price Increase for Printing Equipment

**T**HE 12 per cent increase in ceiling prices for printing trades machinery and equipment granted on January 9, 1946, has been replaced by a 20 per cent interim increase for these products, the Office of Price Administration announced on June 3.

This action, effective June 8, 1946 it is reported by OPA, is necessary because substantial increases in both materials and wage costs since the first price adjustment threaten to curb production.

The interim increase is the minimum needed to relieve immediate hardship and permit continued production of this

machinery. Meanwhile, a re-survey of the industry is being made and, when it is completed, a price increase factor will be determined that will assure the industry profits during the following 12 months that equal its base period margin, the agency said.

This increase, like the initial one which it replaces, is applicable to printing machinery, mechanical accessories including repair and replacement parts, interchangeable parts, jigs, fixtures, workholding and position devices and rests, and mechanical printing equipment. However, unlike the first increase, its

coverage is not limited to these products when "designed and sold exclusively for use by the printing trades."

Instead, it includes sales to users outside of the printing trades. OPA explained that although only a small percentage of total sales are to users outside the printing trades, the computations upon which the increase factor was based included sales to all users. For this reason, the increase applies to sales to all users.

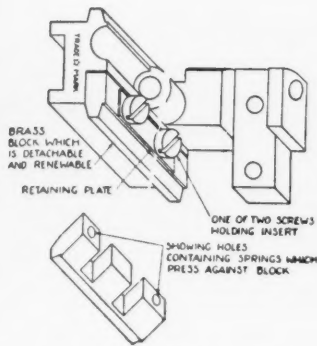
As in the original order resellers will be permitted to pass on to buyers the dollar-and-cent amount by which the cost of the products they buy from manufacturers is increased.

## A Deficiency in Employee Understanding of Corporate Earnings

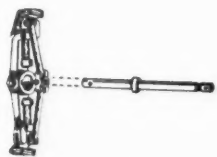
**E**MPLYEE understanding of corporate earnings and profits is almost completely lacking yet business is doing relatively little to educate workers, according to a survey recently completed by *Public Relations News*.

The study shows that more than 58% of industrial executives believe fewer than 10% of their employees have "a reasonably accurate understanding" of the subject. Only 7% of those companies have ever made any study to determine the extent and cause of this ignorance. And of the companies that have made such studies, more than 20% have done nothing to correct the misunderstandings they discovered.

The resignation of James Hale Steinman, Director of the printing and publishing branch, was announced recently by John D. Small, Civilian Production Administrator. The printing and publishing branch was dissolved on June 30. Mr. Steinman, who went to the WPB in August 1944 as a consultant in the Forest Products Bureau, is president of the Lancaster (Pa.) Newspapers, Inc., and is associated with his brother, John F. Steinman, in publishing the Lancaster New Era, Intelligencer-Journal and Sunday News.



**Adjustable Delivery Slide  
Long Finger Block**



**Adjustable Clutch Rod**



**Dial Type Pot Thermometer**

# Thanks...

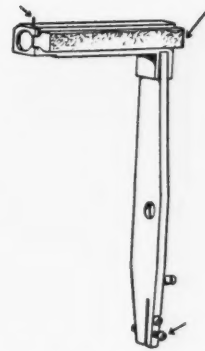
to all of you who have  
been patiently waiting  
for your "STAR" parts

Your understanding cooperation has been an inspiration to us, and we feel you are entitled to a frank report.

We have been trying to bring production up to orders, but while our deliveries on most items are good, there are some parts we are still hard put to keep up with.

Materials, as well as retooling, are still a problem. It will be a little while yet, therefore till we are able to reach our usual standard of speedy service.

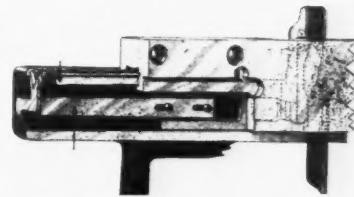
In the meantime, we are trying to bring to you some of the promised new "IMPROVED PARTS" in the "STAR" tradition—parts that will not interfere with our regular production. Here is the first of the new series:



**Front Mold Wiper**



**Chromlox (2 in 1)  
Heating Unit**



**Automatic Line Stop**

## Improved

### ASSEMBLER SLIDE BRAKE OPERATING LEVER

(Part No. D-1463-A)

The extra  
stock here →  
compensates



for wear in Assembling Elevator Casting at point where both contact. This restores complete stroke of lever, eliminating sluggish assembler slide return, as well as reducing wear on Assembler Slide.

PRECISION

TRADE ★ MARK

**LINOTYPE PARTS COMPANY**

Factory and Main Office  
WEATHERLY, PA.

Branch Office  
314 West 10th St., Kansas City 6, Mo.

CHICAGO • MINNEAPOLIS • DENVER

## Full-time Machinist in Small Plant

AT most of the regional newspaper mechanical conferences it is customary for mechanical executives to submit questions. It is expected, of course, that the answers to these questions will help solve executives' particular production, mechanical or management problems.

We have noticed, however, that some of these questions are indirect. That is, they are asked from an over-all or collective standpoint rather than from a specific plant standpoint. Perhaps the reason for this is that the executive asking the question doesn't wish to be considered the only one having that particular problem.

One of the questions submitted to the Great Lakes Newspaper Mechanical Conference in Cleveland was passed over because, apparently, most of the executives in the audience felt it could be answered easily by the one asking the question. The question was: *How many carry a full-time machinist in a six-machine plant?*

*Printing Equipment Engineer* feels a definite answer to this question should have been given at the conference inasmuch as the one submitting it considered it of enough importance to send it in upon invitation of the program chairman.

Sometimes, a plant executive may have considerable difficulty in solving a

problem because of the peculiar conditions existing in his plant. The same situation in another plant may be no problem at all. The reason in the first instance may be unwillingness to increase payroll expense in a growing plant, or it may be due to the inability of the composing room superintendent to convince the business manager that the additional expense is necessary. Thus we will assume that while the executive asking the question quoted above wished an answer to his own personal problem, he asked it in indirect manner.

The problem of employing a full-time machinist in a six-machine newspaper plant is an individual problem. There is only one way to approach the solution. This can be done by asking and answering a number of questions. Among them are: (1) Is the machinist expected to clean plungers, polish spacebands, give attention to the mold and casting mechanism, start distributors, clean out metal squirts, and make running repairs during operating time? (2) Is he expected to operate the material-making machine? The material-making machine in a six-machine plant possibly will only need to be operated part time. (3) Is the machinist expected to repair cameras, typewriters, glasses, pens and pencils, guns and gadgets for employees in the entire plant? (4) Is the machinist expected to act as a maintenance man for the entire plant? (5) Is he expected to make electrical wiring changes and do a certain amount of plumbing work? (6) Is he expected to assist with press repair work? (7) Granted that the machinist is

a fair operator, will it be necessary to have him operate a keyboard during a short period each day? It seems to be a custom in many plants to utilize a machinist's services on keyboards at peak periods, or in emergencies when one of the operators is absent. In smaller plants, sub lists don't exist. Consequently, elasticity of the small plant foreman's working force isn't as good as in the larger plant where a sub list is available.

If the problem of engaging a full-time composing room machinist exists in your plant, honest answers should be provided to all seven questions. If production from the machines diminishes there certainly is a cause for it. Since conditions vary from one plant to another the best answer to the question is to make your own analysis. Having the facts at hand, the foreman can discuss the matter confidently with the business manager.

## Celebrates 10th Anniversary with Plant Enlargement

Eastern Newspaper Supply, Corona (L. I.), New York, is preparing to celebrate the tenth anniversary of the establishment of its business. In June 1946, Eastern will have completed 10 years of existence. General Manager Edgar A. Mills, Jr., also announced the completion of an extension to the present plant which more than doubles former facilities. The increase in floor space is 116%. The firm handles newspaper, stereotype, composing room and press-room supplies, and equipment of various kinds.

The new addition is constructed of concrete, brick and steel. A rearrangement of the existing building has been effected to provide more efficient production, better storage and stock handling, and larger office area.

New high-speed stereotype backing felt cutters have been installed. Some additional floor space has been utilized to carry larger inventories of supplies.

With the completion of the new addition, entrances are provided from two streets. The building is L-shaped. A feature of the new addition is that a truck entrance has been provided directly from the street to the shipping room.

## Equipment Makers Meet

The annual meeting of the board of directors and the annual meeting of the members of the National Printing Equipment Association will be held at the Hotel Traymore, Atlantic City, N. J., on Monday and Tuesday respectively, Sept. 9 and 10. Secretary James E. Bennet advises members that members may reserve rooms either through the hotel direct or through himself. If rooms are reserved through the hotel, please advise Mr. Bennet. In the case of direct hotel reservation, members should also advise the hotel that they are connected with NPEA.

## SNPA Eastern Division Mechanical Conference

THE Eastern Division of the Southern Newspaper Publishers Association Mechanical Conference is to be held in Jacksonville, Fla., at the George Washington Hotel, September 2, 3 and 4.

A new session in the Conference has been added which will be called *Building and Planning*.

The Committee has already been assured that there will be a banner attendance at this Conference.

The Executive Committee of the Eastern Division is composed of C. Frank Mann, Supt. Comp. Room, and Chairman Executive Committee, Louisville, (Ky.) *Courier-Journal* and *Times*.

E. O. Aslinger, Production Manager, Greensboro, (N. C.) *News-Record*.

W. B. Astor, Stereotype Supt., Memphis, (Tenn.) *Commercial Appeal*.

Claude L. Baker, Supt. Comp. Room, New Orleans, (La.) *Times-Picayune* and *States*.

H. R. Capps, Chief Machinist, Jacksonville, (Fla.) *Times-Union*.

Henry M. Duke, Supt. Comp. Room, Charleston, (S. C.) *Post-Courier*.

I. J. Gardner, Jr., Foreman Comp. Room, Chattanooga, (Tenn.) *Times*.

Harry Wilson, Stereotype Supt., Birmingham, (Ala.) *Age-Herald*.

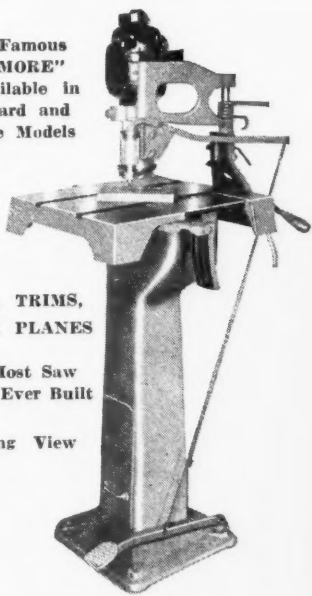
Walter Johnson, Secretary-Manager and Secretary Executive Committee S.N.P.A. Post Office Box No. 1569, Chattanooga 1, Tenn.

H. R. Capps, a member of the Executive Committee, has been asked by the General Chairman to act as Local Chairman for the Conference in Jacksonville.

# SEE THESE MODERN MACHINES

*and others in Booths 27-28, Pittsburgh Mechanical Conference*

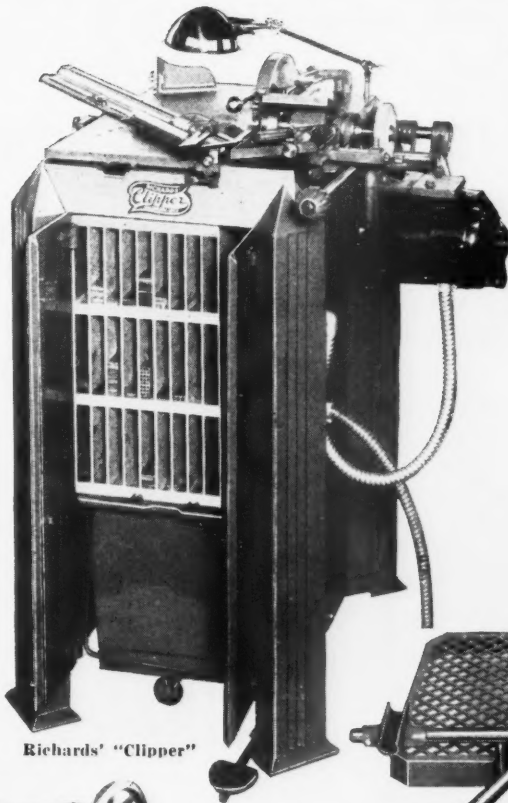
The Famous  
"DO-MORE"  
is available in  
Standard and  
Deluxe Models



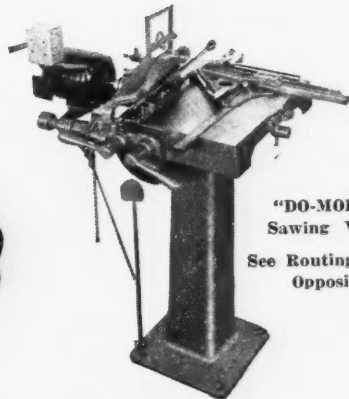
SAWS, TRIMS,  
ROUTS, PLANES

The Most Saw  
Per \$1 Ever Built

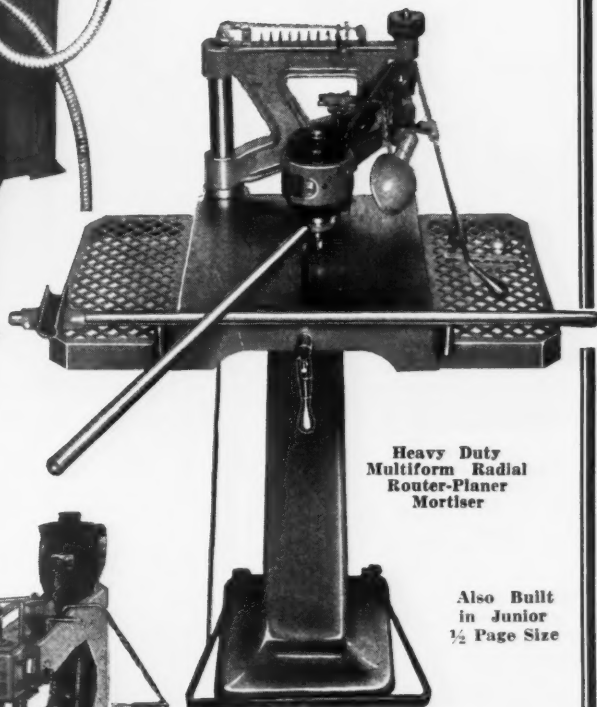
Routing View



Richards' "Clipper"

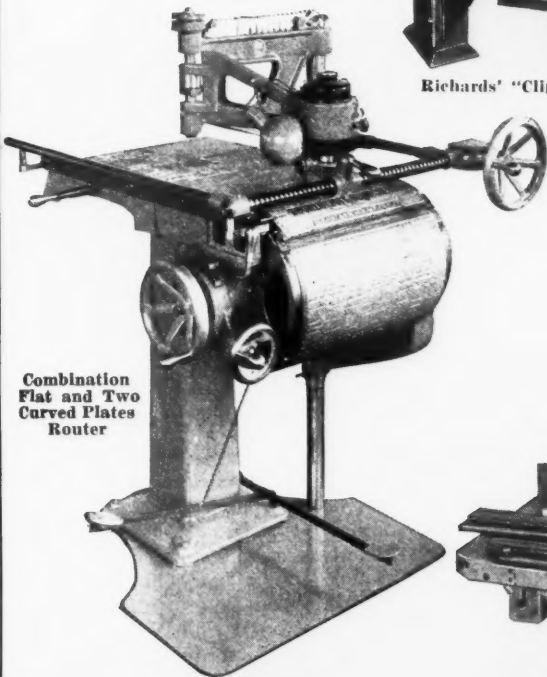


"DO-MORE"  
Sawing View  
See Routing View  
Opposite

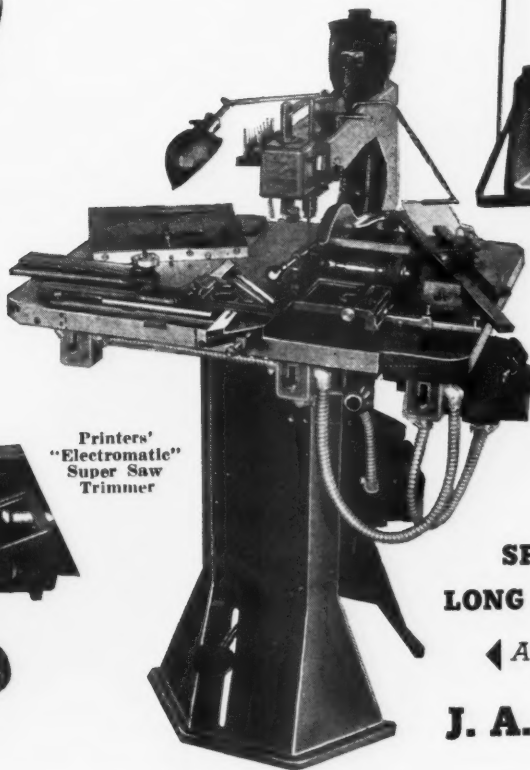


Heavy Duty  
Multiform Radial  
Router-Planer  
Mortiser

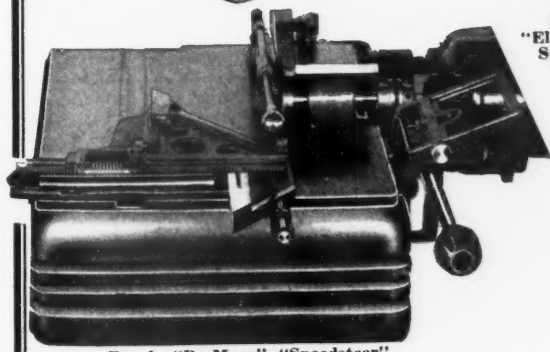
Also Built  
in Junior  
1/2 Page Size



Combination  
Flat and Two  
Curved Plates  
Router



Printers'  
"Electromatic"  
Super Saw  
Trimmer



Bench "Do-More" "Speedsteer"

*Our Creations  
Lead  
the Parade*

*"Made by a Printer  
for Printers"*

**SPEED — PRECISION  
LONG LIFE CONSTRUCTION**

◀ Ask for Advance Dope ▶

**J. A. RICHARDS CO.**  
Kalamazoo, 13F



27th Annual Craftsmen's Convention, Montreal, Sept. 8-11

## \$20 Million Graphic Arts Building Is to Be Erected in New York

WHAT is claimed to be the largest commercial-industrial building in the East will be erected on a three-block site on lower West End Ave., Manhattan, at an estimated cost of \$20 million.

The new project will be on the order of the Port Authority building on Eighth Ave. but will contain more space than either that edifice or the Empire State building.

The building will be known as the Graphic Arts Center and will occupy a site of about 4 A. on the west side of West End Ave. from 62nd to 65th St. at the edge of the New York Central Railroad's 60th St. yards.

It will contain 2,250,000 sq. ft. of floor space and have a cubic content of 40,000,000 cu. ft. It will be specially designed and constructed to accommodate presses and other heavy equipment used in the printing and allied industries. The

live floor load will be 350 lbs. per sq. ft.

It has been announced that many tenants will occupy entire floors of more than 160,000 sq. ft. Each of these will have two private elevators to their floors. Plans call for eight passenger elevators and 24 freight lifts.

Francisco & Jacobus are the engineers and architects. Construction work will be done by Thompson Starrett Co.

### Hoe Pays Off Loan

R. Hoe & Co., Inc., printing press and saw manufacturer, has repaid the \$750,000 bank loan obtained last October and has also terminated the revolving credit under which the loan was obtained, Joseph L. Auer, President, announced on June 7. This leaves ahead of Hoe's capital shares no debt other than current obligations, Mr. Auer said.

### Joins Graphic Arts Staff

Lewis E. Walkup, formerly physicist with the Western Cartridge Co., East Alton, Ill., has joined the staff of Battelle Institute, Columbus, O., where he will be engaged in Graphic Arts research. Mr. Walkup holds a Bachelor of Science degree in electrical engineering from Washington University, St. Louis, Mo., and has also studied at Henderson-Brown College, Arkadelphia, Ark. He is a member of the American Physical Society; American Meteorological Society; Sigma Xi, honorary scientific society; Tau Beta Pi, honorary engineering society; and Pi Mu Epsilon, honorary mathematics society.

### Vibro-Levelers Bulletin

*Vibro-Levelers* is the title of an 8-page bulletin, No. BU50, issued by Bushings, Inc., which gives information about machinery mountings which are designed to stop transmission of vibration as well as provide a means of leveling the machines.

### House Magazine

#### Editorial Manual

In a 44 page manual, Champion Paper and Fibre Co. presents *House Magazine Copy Writing and Preparation for the Printer*. In the book are discussed corporate (company) journalism, the company editor, the news story, the feature story, training reporters, preparing copy for the printer, and a bibliography containing titles of books which should be on the house magazine editor's bookshelf. This book is a working manual for house magazine editors. It contains valuable information, as indicated above, for guiding the sources of news items, feature articles, and the preparation of copy for the printer.

The book was written by K. C. Pratt, editor of *Stet*. It will be distributed as a service by Champion to editors and company members interested in industrial journalism. Copies may be obtained gratis upon request to Advertising Dept., Champion Paper and Fibre Co., or *Printing Equipment Engineer* will gladly take care of your request.

For later release, Champion plans to publish other books dealing with house magazine layout, illustration, art, photography and reproduction, together with house magazine production by letterpress and offset.

#### TECHNICAL BOOKS

may be ordered through *Printing Equipment Engineer*. Currently, titles cover most subjects with exception of photo-engraving and rotary newspaper presses.

# BIG CHIEF REMELTER

## FEATURES

**DUOFOLD INSULATION** reduces fuel costs by conserving the heat.

**THERMOSTATIC CONTROL** automatically regulates the heat.

**JORDAN INTERNAL VALVE** prevents metal from freezing in the spout.

**PRESSURE CONTROL** eliminates danger of the pot cracking.

**TOOTHED BAFFLE-RING** speeds melting and reduces drossage.

**QUICK-HEAT MUFFLER** reduces melting time by drawing heat through body of the metal.

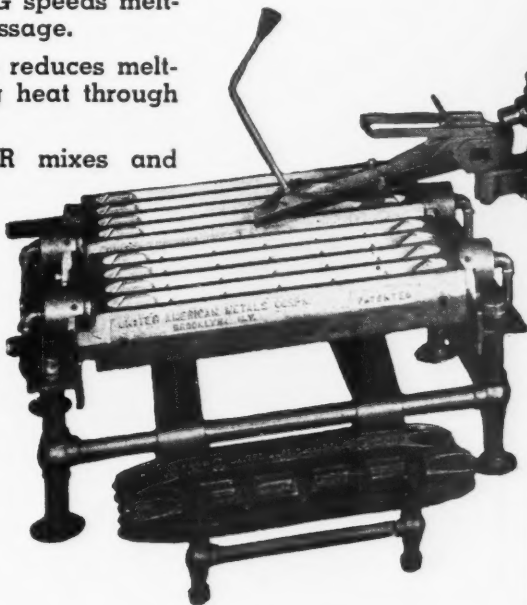
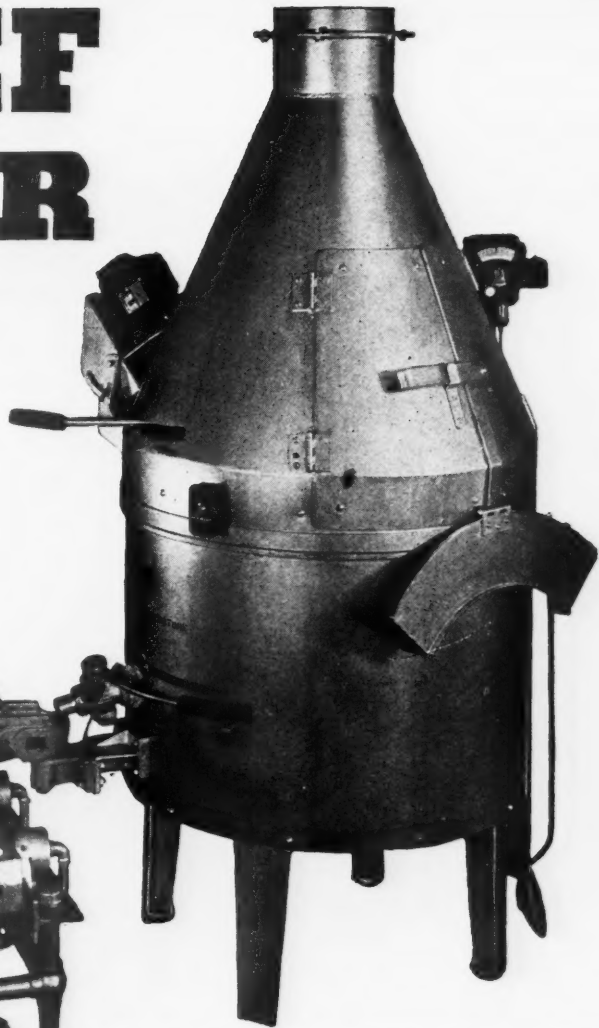
**MOTORIZED AGITATOR** mixes and cleans the metal.

**INTERNAL LIGHTING** permits efficient skimming.

**CONTINUOUS CASTING-TROUGH** speeds casting.

**CAPACITIES:** 1200 lbs., 2400 lbs., 3200 lbs., 4800 lbs.

**FUEL:** Gas (manufactured, natural or mixed), Electricity.



The unit shown here is a 2400 lb. electric heated Big Chief Remelter with a Twin-eight (16 cavities) water-cooled mold that casts the Double-ear Slip-off ingot.

also—the **LITTLE CHIEF** for small and medium sized plants.



With this Remelter you can save as much as 50¢ from every fuel and labor dollar which your obsolete furnace is costing you. Look into your remelting costs and see how soon this Big Chief will pay for itself in the savings on fuel, labor and on dross reduction.

Write for our illustrated catalogue which contains operating information on the Big Chief and Little Chief Remelters, Twintype molds that cast Double-ear Slip-off ingots which drop off the feeder-hook automatically and the Jordan Continuous Feeder.

## United American Metals CORPORATION

and affiliated corporations

204 Diamond Street, Brooklyn 22, N. Y.

2252 W. Hubbard St., Chicago 12, Ill. 4105 Curtis Ave., Baltimore 26, Md.

789 Bryant St., San Francisco 7, Cal. 2444 E. 25th St., Los Angeles 11, Cal.

**ORDERS WILL BE FILLED IN THE ROTATION OF THEIR RECEIPT. WE ADVISE YOU TO PLACE YOUR ORDER NOW.**

This grand little Remelter is bottom-pour, self-feeding and built for continuous operation. It has a potential remelting capacity of 2500 lbs. in an 8-hour day, requiring about one hour of a man's time. Fumes cannot escape while the Remelter is in operation. The unit shown here consists of the Remelter and Twin-four water-cooled mold that casts the Double-ear Slip-off ingot.

When writing the advertiser please mention PRINTING EQUIPMENT *Engineer*—July 1946

## EXECUTIVE Qs

Frank M. Sherman, Director of Advertising and Publicity for the Lanston Monotype Machine Co., resigned from that position effective July 15. After August 1 Mr. Sherman will assume his new duties as Executive Secretary of the



FRANK M. SHERMAN

Recently resigned from Lanston Monotype Machine Co. will assume new duties as Executive Secretary of International Trade Composition Association.

International Trade Composition Association. He will maintain an office in Philadelphia at 526 Chestnut St. Mr. Sherman became associated with the Lanston Monotype Machine Co. in 1926. He is well known throughout Graphic Arts circles and in particular has spoken before practically every Craftsmen's club in the country. His talks in Bible printing and typography are well remembered. In assuming the duties of executive secretary of the ITCA, Mr. Sherman will be returning to the employ of the organization which he helped create in 1920. Up until 1923 he was ITCA's secretary. Since that time he has been unofficially connected with the trade composition group continuously. The employment of Mr. Sherman by ITCA to manage its affairs indicates a revival of interest in cooperative activities by its members. It also is evidence that the membership wishes to promote actively the general interests of the trade composition industry. Mr. Sherman states that as Executive Secretary of ITCA his principal objectives will be to promote formation of local organizations, promote installation and operation of sound bookkeeping and cost accounting throughout the industry, increase efficiency of plant productive

operation, improve quality of production, promote services offered by trade composition plants, stimulate meetings within the trade, and advance the general welfare of trade compositors.

Earl Woodard, Production Manager of the Knight Newspapers, has moved from Detroit to Chicago where he will make his headquarters at the Chicago *Daily News*. Formerly, his headquarters were at the Detroit *Free Press*. He has purchased a home in Chicago and expected to move into it the first part of July.

Through inadvertence, *Printing Equipment Engineer* published the information that Emory Worthington, formerly of the engineering department of the Goss Printing Press Co., had joined the W. F. Hall Printing Co., Chicago, as mechanical engineer. Actually, Mr. Worthington is now Vice President and Chief Engineer of the Rotogravure Engineering Co. We are glad to make the correction.

Richard E. Sylte is in the mechanical superintendent's office of the Chicago *Sun*. The mechanical production of the *Sun* is done by the Chicago *Daily News*, in whose building the *Sun* is located. Mr. Sylte acts as contact between the *Sun* and



Richard E. Sylte is associated with Chicago *Sun's* office of mechanical superintendent.

the *Daily News* on mechanical problems and is also giving study to new equipment, especially the composing room, for the proposed new *Sun* manufacturing plant. From 1924 until the outbreak of the war, he was associated with Intertype Corp.; during the last 12 years as Chicago Branch Sales Manager. During the war he was with the Chicago office of WPB.

Arne Berglund, Vice President of The Fylgia Printing Co. in Stockholm, Sweden, recently paid a visit to the offices of *Printing Equipment Engineer*. The accompanying photograph of Mr. Berglund was taken at the time of his visit to this office. Mr. Berglund is a son of Bruno Berglund, president of The Stockholm Printers Association. He has been taking an intensive course in industrial economics at Yale university. His objective in this country, in addition to attending Yale University, is to observe American printing methods, industrial

organization, plant management and to visit printing establishments in various parts of the United States. He plans to return to Sweden about the middle of August. Mr. Berglund commented upon



Arne Berglund, Vice President, Fylgia Printing Co., Stockholm, Sweden.

the printing industry in Sweden by saying that his firm publishes a sporting paper, a farm journal, and a number of trade papers. In Sweden the demand for printing is growing tremendously. He declared that as in the United States, the market for printing machinery is greatly accelerated. He also said Swedish printers are confronted with the same problems as American printers. There are shortages in paper, metals, machinery and in labor. Before the war, Germany supplied some of the equipment used by Swedish printers but much of it came from the United States.

Burt S. Burnett, formerly composing room machinist with the Detroit *Free Press*, established some time ago a company under the title, Lino-Inter Service Co., at 369 East Grand Blvd., Detroit. Through his company, Mr. Burnett overhauls and adjusts line-composing machines in smaller plants in the Michigan territory.

Olin E. Freedman has established an office at 105 West Monroe St., Chicago 3, Ill. He is now a consultant to management in the Graphic Arts and allied industries. Mr. Freedman was on active duty with the U. S. Navy for three years. He has disposed of his former interests in Production Standards Corporation and is devoting his efforts exclusively to consulting work.

Harris-Seybold personnel changes, and the formation of a new Pacific sales district under the direction of William Guy Martin, vice president and former western district manager, have been announced by H. A. Porter, vice president in charge of sales for the Harris-Seybold Co. Ren R. Perry has been promoted



*Designed by America's Outstanding Photo-mechanical Engineers!*

**SEE THIS FINE CAMERA**  
 at the ANPA show  
 William Penn Hotel  
 Pittsburgh, Aug. 5, 6, 7

Includes: NEW multiple turret lensboard, NEW precision copyboard and positive holder, NEW dial control filling type vacuum back, NEW accurate auto-focusing scaling system, complete darkroom control.

# Consolidated DARKROOM COLOR CAMERA

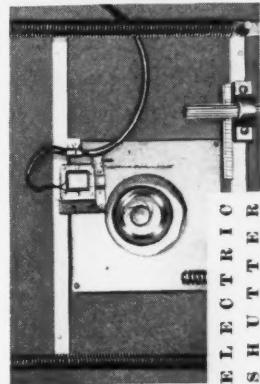
This is IT!... The darkroom camera for which the entire industry has been asking... the one and only camera that tackles COLOR or BLACK-AND-WHITE jobs, produces finest negatives with a minimum of effort and a maximum of speed. The Consolidated Darkroom Color Camera combines a host of new features and desirable improvements all in a single unit that automatically assures precision register, can handle any job with ease and accuracy.

2 sizes: 24" x 24" and 31" x 31". All-metal construction, machined to finest tolerances; all-welded torque-proof steel base; entire construction spring suspended to absorb shock and vibration; all moving parts operate with airplane anti-friction needle bearings.

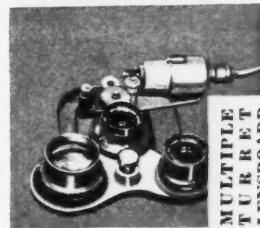
**Consolidated**  
 PHOTO ENGINEERS  
 EQUIPMENT  
 COMPANY  
 2846 W. NORTH AVENUE • CHICAGO, ILL.



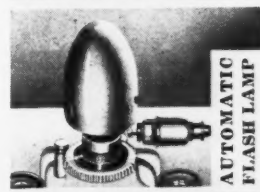
CENTER GEAR DRIVE



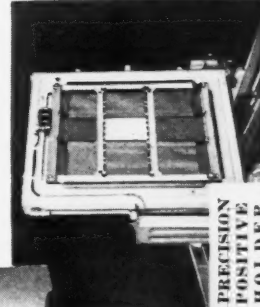
ELECTRIC SHUTTER TURRET



MULTIPLE TURRET LENSBOARD



AUTOMATIC FLASH LAMP



PRECISION POSITIVE HOLDER

from assistant manager to manager of the western district, and G. D. Baber continues as assistant manager. The newly formed Pacific District embraces all states and portions of states west of



**William G. Martin, Manager new Pacific Sales District of Harris-Seybold Co.**

Richard C. Baker, formerly manager of the Canton, O. office of Ernst & Ernst, public accountants, has become associated with The Timken Roller Bearing Co. as an executive assistant according to a recent announcement by company officials. Among other duties, Mr. Baker will supervise all tax problems and affairs; and will make special studies of accounting and related matters.

H. A. (Arthur) Orrell, formerly engaged as an executive in the production department of the Tulsa (Okla.) *Tribune*, is now superintendent of the Miami (Fla.) *Daily News*.

Lewis A. Lara, Export Manager for J. M. Huber, Inc., New York, recently completed a four-week trip to Mexico. Mr. Lara besides stopping in Mexico City visited Guadalajara, Chihuahua, Monterrey, Veracruz and Puebla.

Carlton B. Short, publisher of *The Roanoke Times* and *World-News* and president of the Southern Newspaper Publishers' Association died in his hotel room in Washington recently. Mr. Short was a past president of the Virginia Press Association. In 1945 Mr. Short was chairman of the SNPA newsprint committee and was instrumental in establishing newsprint mills in the South. He was on the committee of the ANPA endeavoring to increase newsprint production.

The Fred'k H. Levey Co., Inc., Div. of Columbian Carbon Co., announces the appointment of Joseph D'Artina as New York sales manager. Mr. D'Artina has had over twenty-five years' service with the Levey Co. He was New York

branch manufacturing manager for several years and also supervised the technical sales service work. For the last few years Mr. D'Artina has covered the Upstate New York territory for the company, and his new duties will comprise the supervision of sales in the Northern New Jersey, New York, and New England territories.

Matrix Contrast Corp. has announced the appointment of Jack Faris of Riverside, Calif., recently returned from service in the Navy, as west coast representa-



**Jack Faris, west coast representative for Matrix Contrast Corp.**

**Ren R. Perry, Manager of Harris-Seybold's Western District.**



tive for Black & White Matrix Contrast Service with headquarters at Los Angeles. Charles H. Stout, vice president of Matrix Contrast Corp., also announced that Matrix Contrast Service now has several service crews working on Black & White installations in that area and are prepared to give the same service to the west coast that is available throughout the east and middle west.



**Assistant Manager G. D. Baber of Harris-Seybold Co., Western District.**

the Great Divide, as well as El Paso County in Texas, the Hawaiian Islands, and Alaska. Mr. Martin will have his district offices in San Francisco. G. L. Coffman and G. W. Shively, sales representatives of Harris-Seybold, will continue in the San Francisco and Los Angeles offices, and C. A. Harwood, formerly in the general sales office in Cleveland, will be added to Mr. Martin's sales staff. The Pacific District sales force will be further augmented by the transfer of F. X. Wilkinson, sales representative, from the western district. P. H. Schafer, who has had experience at the Seybold factory in Dayton and in the eastern district, and has recently been staff assistant to Mr. Porter in Cleveland, has been added to the sales staff of the western district in Chicago.



Some members of the Los Angeles Club of Printing House Craftsmen pausing to have their picture taken previous to the Book Auction held by the Club of June 19 in Los Angeles. From left to right, they are: Robert H. Kerr, president; Geo. C. Bowring, book chairman for the auction; Thomas Pascoe, immediate past president; Ray Fisher, first vice president, and G. Fred Smith, publicity chairman.

The Los Angeles Club has a pretentious educational program under its wing in cooperation with the Los Angeles Public Library. The project was started in 1944 under the administration of then president Thomas Pascoe. It was planned to exhibit books related to the Graphic Arts Industries in the main rotunda of the library building and then later add them to the library shelves for general circulation.

To facilitate the display of the books in the rotunda, the Club decided to provide two specially constructed book cases. Funds for the cases were to come from profits from the sale of a book on Benjamin Franklin which the club had previously printed.

Architectural Designer Carl S. Anderson was commissioned to design the illuminated cases. A glimpse may be had of these cases immediately back of the Craftsmen in this picture.

# Patents

## For The Graphic Arts Field

Covering patents issued May 14, May 21, May 28, June 4, June 11.

All new patents for the Graphic Arts are reported exclusively for *Printing Equipment Engineer* by *Invention, Inc.*, an industrial patent research organization in Washington, D. C. *Invention, Inc.*, presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issuing each week. *Printing Equipment Engineer* is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

### Binding, Cutting, Perforating:

2,400,744. BINDING DEVICE FOR CATALOGUES, magazines, pamphlets, etc., in which selected sheets may be removed and placed without disturbing the order of the remaining sheets. The cover page (preferably of heavier stock than the inside pages) has a longitudinal slit along the greater inner portion of the fold line or trough section of the book. The inner pages are solid along this section of cut-out of the cover. However they have marginally opening slots formed at the tops and bottoms of each sheet, the slots extending far enough down to have their inner edges coincide with opposite edges of the cover slit. When all sheets are assembled, a slim rod is inserted in such a manner as to diverge inner pages along their crease lines out through slit of the cover page. The rod is the full length of book and is on the outside of the cover above and below the slit. Rod may be corrugated, or bent at top and bottom, to hold it in place. Alternatively, a flat strip is contemplated to hold the pages together instead of the rod. Invented by Henry Einzig, Chicago, Illinois. Assigned to Stemar Displays Company, Chicago, Ill. Application February 13, 1943. 2 claims.

2,401,310. PERFORATING RULE used for forming rows of perforations through sheets of paper that are later to be removed from an assembly, such as tablets or tickets. This invention is designed to insure tearing at the exact terminus of the line of perforation in the edge of the sheet to be removed. The rule has a row of spaced, perforating dies or teeth, the row terminating at both ends in a wider and longer sharpened tooth. This insures that the extreme edges of the sheet are cut. When the sheet is lifted for removal by the least twisting stress, the rend is started at just the desired point. Invented by Clarence P. Mayhew, Duluth, Minnesota. Unassigned. Application April 9, 1945. 1 claim.

### Composing Room Equipment:

2,400,567. METHOD OF CALCULATING AND, THEREAFTER, CONTROLLING LINE PRINTING MACHINES. The column makeup of a printed form is calculated by the use of blocks and then these blocks are used to control the indexing means of a line printing machine, whether the printing is by ink or a photo process. Fonts of blocks are provided corresponding with the heights of various fonts of type. Each block is formed with pawl coacting ratchet-like means at one end. Additional blocks of varying thickness for line spacing have their height and upper ends formed to coact in the pawl coacting function of the blocks of the fonts. Assemblage of certain blocks chosen from fonts in combination with chosen line spacing blocks enables selection of fonts to be used and preinspection of a makeup. Assemblage coacts with pawl means to reproduce the makeup in print. Invented by George L. Morrison, Evanston, Illinois. Unassigned. Application March 30, 1942. 3 claims.

DESIGN 144,880. ORNAMENTAL DESIGN FOR A FONT OF PRINTING TYPE con-

sisting of capital letters only. Each letter is made to resemble a pattern arrangement of one or more narrow, curved leaves, as off a willow tree. Invented by Luther J. Wiesner, New York, N. Y. Unassigned. Application November 15, 1945. Term of patent 14 years.

### Feeding, Folding and Delivery:

2,400,447. WEB-REGISTERING DEVICE, more especially for controlling wrapping or packaging machines, the web being provided with recurrent printed indicia or patterns of high dielectric constant, such as a bronze or other metallic particles dispersed in a non-conductive medium. These printed indicia or patterns serve to stop the web in predetermined position for the wrapper-severing operation. Condenser plates are spaced from and extend into the proximity of web. A high frequency electric circuit is connected to plates and is affected by capacitive coupling between

plates and spots, successively. A device controlled by the circuit terminates the feeding of web when plates are capacitatively coupled by one of the spots, stopping successive spots in predetermined registered position. Invented by Franklin H. Wells, Hackensack, New Jersey, and John J. Root, Hastings on Hudson, New York. Assigned to American Machine & Foundry Company, Brooklyn, New York. Application April 25, 1940. 6 claims.

2,400,527. WEB SLITTING MACHINE having a positively driven rotary platen roll and circular cutters pressed peripherally against the roll to be rotated and web material passing between the roll and the cutters. The platen roll is journaled for rotation with provision for longitudinal movement during rotation. The longitudinal movement results from a cam action in one direction against a spring force urging the platen roll in the other direction. A speed reduction gearing between the platen roll and the cam-actuated means causes the longitudinal reciprocation of the platen



**SOUND  
LOGIC**  
VS  
**SOUND LOGIC**

A FIRECRACKER makes a lot of sound . . . but carries little conviction.

The makers of A-Z ALLOY and ZOMO ELECTRIC ZINC however have been extremely careful to base all claims for their metals on laboratory and practical performance tests.

These metals were developed to fill definite requirements. The Electric Induction Process, Backote, and Machine Cut Finish were not merely developed to make high sounding sales talk . . . they were perfected to enable engravers to have the best metals possible for every engraving need.

You can order these metals from leading engravers' metal and supply houses.

**ZOMO ELECTRIC ZINC** **A-Z ELECTRIC ALLOY**



**Group at Speaker's Table** at luncheon given in honor of members of Dutch Federation of Master Printers of Holland, Europe, by Graphic Arts Association of Illinois, Inc., at Morrison Hotel, Chicago, June 10, 1946.

Left to right: S. F. Beatty, Secretary and General Manager, Graphic Arts Association of Illinois, Inc.; Gaylord Donnelley, R. R. Donnelley & Sons Co.; D. Meyer, Amsterdam; A. Q. de Flines, Amsterdam; Otto E. Bull, president, Graphic Arts Association of Illinois, Inc.; J. A. Schuurman, Consul General of The Netherlands; Carl E. Dunnagan, Inland Press, Chicago; Pieter Borst, Amsterdam; William H. Barnes, A. R. Barnes & Company, Chicago.

Pictures presented to Dutch visitors by courtesy of Pontiac Engraving & Electrotyping Company. Other pictures by courtesy of Graphic Arts Association of Illinois, Inc.

roll to occur at a relatively low speed as compared with the speed of rotation of the roll, thus preventing scoring and grooving of the platen roll by the cutters. Invented by John A. Aycock, Rock Hill, South Carolina. Assigned to Rock Hill Printing & Finishing Company, a corporation of Delaware. Application December 13, 1943. 6 claims.

**2,400,890. SHEET HANDLING APPARATUS** for a printing press. There is a reciprocal sheet handling carriage and an endless conveyor disposed laterally of the apparatus within the space defined by the outer surfaces of the side frames. No moving parts are exposed outside the frame which might cause damage or inconvenience. The handling mechanism assumes positions at various distances from the base of the machine or it may be unfastened from the base and positioned as desired. Connection between handling and driving means is readily separable. Invented by August A. Saul, Pittsburgh, Pennsylvania. Assigned to Miller Printing Machinery Company, Pittsburgh, Pennsylvania. Application April 3, 1941. 24 claims.

**2,400,927. SHEET GUIDE** for registering sheets in a sheet feeder used for presenting them to a printing press or other sheet handling machine. A guide block is provided, for either front or side registering, which will adjust itself to variations in the shape of the sheets so as to present its full extent to the edge of the sheet during registering operation, whether or not the sheets are cut precisely square or straight, and whether or not the position of one guide of a pair located along the same edge of the sheet is shifted relative to the others. The block has a bearing on which it is adapted to move into parallelism with the sheet edge in response to contact. Invented by Charles W. Harold, University Heights, Ohio. Assigned to Harris-Seybold-Potter Company, Cleveland, Ohio. Application June 15, 1944. 11 claims.

**2,400,991. SHEET PRINTING AND CRIMPING** method of providing assemblies of a plurality of sheets capable of being handled as a unit. Sheets are picked up from the press's stack table by the standard sheet transfer suction device in units of two or more sheets and transferred to an impression cylinder without previously securing the sheets. This is accomplished by perforating all but one of a series of sheets to be handled as a unit, the unperforated sheet being the bottom sheet of each unit. When the suction heads are lowered upon the stacks the perforated sheets permit the vacuum to be applied to the non-perforated sheet so that when

the suction heads are lifted the sheets superposed upon the non-perforated sheet will be lifted. Dies are provided for crimping the sheets at the beginning of the printing operation to hold them together for use as a unit. Invented by Arthur L. Hess, Cincinnati, Ohio. Assigned to Ditto, Incorporated, Chicago, Illinois. Application September 25, 1942. 2 claims.

**2,401,203. PICK-OFF AND STACKING DEVICE** more especially for machines used to print exceedingly large drawings or tracings, such as a dry photo printing and developing machine of the Ozalid type. It may be formed as an attachment for machines already in use or may be constructed as a part of an original structure. Device has a stationary vacuum chamber in the form of a circular tube, numerous spaced belts passing about chamber and about a driving roller. A second roller freely engages with the belts as they pass about the first roller. Openings, formed in the tube between the spaced belts, are confined to a relatively small area and wedges between the belts maintain them in spaced relation and are adapted to strip material picked off by suction within the chamber. A tray to receive the delivered material is positioned so that material is received in a stack in predetermined sequence. Invented by Frederick O. Trump, Binghamton, New York. Assigned to General Aniline & Film Corporation, New York, N. Y. Application March 6, 1945. 10 claims.

**2,401,396. PHOTOELECTRIC CONTROL CIRCUIT** employing standard high vacuum tubes instead of less reliable and more expensive gas tubes. The control is useful where energy impulse, derived from a phototube, has to initiate a given operation independently of the duration of the impulse. It can be applied to various uses, for example, for controlling the speed of strip material to be cut in accordance with register marks regularly applied to the material; or for detecting random marks, such as flaws in webs or seams of cloth webs, the travel of the web being stopped when such a mark passes a predetermined point. Invented by William F. Wolfner, II, Methuen, Massachusetts. Assigned to Photo-switch, Incorporated, Cambridge, Massachusetts. Application January 17, 1942. 12 claims.

#### Miscellaneous:

**2,400,700. SCREEN PRINTING OF NECKTIES.** By this process the normal overlap portion or region of any inaccuracies

of printing lies along the cut line or seam of the necktie and the screen printing process directly marks on the fabric the region of inaccuracy. Such marks of inaccuracy are used as cutting guides by the person dividing the printed fabric into necktie sections. Successive areas of the fabric are printed through a screen formed with two rectangular end portions joined by a connecting portion in the form of a parallelogram, the oblique lines coinciding with the bias-cutting lines along which the fabric is to be cut. Invented by James C. McCurrach, Brooklyn, New York. Unassigned. Application October 7, 1942. 2 claims.

#### Plate Making:

**2,400,518. QUICK MOLDING OF AN ELECTROTYPE MATRIX,** usually requiring only two minutes or less, and utilizing a method said to be more efficient than the usual method of using wax or lead for an electrotype matrix. The matrix is molded from a sheet of vinylacetate vinyl chloride copolymer which is moldable to matrix form within a temperature range of about 200-230°F. The face of the printing plate, or pattern, is contacted with the face of a sheet of the plastic. A resilient rubber blanket is applied to the back of the sheet. After the sheet has been heated, pattern, sheet and blanket are pressed firmly together, causing the sheet to conform to the printing pattern. The pressure is continued until the plastic has cooled and set in the form of the pattern to prevent change in the overall linear dimensions of the matrix. A shell is electroplated on the matrix carefully so the matrix will be available for plating additional electrotype shells. Invented by Frank W. Kreber, Bruce W. Gonsler, and Roland M. Schaffert, Columbus, Ohio. Assigned to Printing Plates Research, Inc., Cleveland, Ohio, by mesne assignments. Application June 9, 1942. 6 claims.

**2,400,987. STEREOTYPE PLATE CASTING** machine having pivoted dies serving as patterns or cores for forming recesses in the back of stereotype plates which apply a circumferential tension to the plate. The improvement is pertinent to the general type of casting machine disclosed in patent No. 799,759, and particularly for use with the machines manufactured by The Goss Printing Press Company, on the market known as the Goss 44-C or 44-F. The purpose of providing the recesses in back of the plate is to prevent the plate from becoming displaced from the cylinder during continual running causing possible slight deformation, or from centrifugal force. The actuating mechanism for the dies is interconnected with a lockup for the cope, so that when the lockup is moved to a locked position, continued movement will serve to project the dies to casting position. After the plate has been cast, movement of the lockup in an opposite direction retracts the dies to a plate-releasing position and unlocks the cope. Invented by Frank A. Foster, Melrose Park, Illinois. Assigned to The Goss Printing Press Company, Chicago, Illinois. Application November 16, 1943. 1 claim.

**2,401,018. STEREOTYPE MATRIX** produced by direct pressure molding of a dry flog against relief halftone or line photoengraving which has been previously prepared with an ink of a color contrasting with the surface of the flog, and a lubricant containing stearin or other non-drying, non-volatile glyceride. Preferably the flog is laminated so that it may be molded without beating, and has a face of light color, such as gray or pink. The original photoengraving to be duplicated is inked with a special ink, to contrast with the flog's face, consisting of carbon black and neat's foot oil mixed to usual ink consistency. On casting, the heat of the molten stereotype metal causes the glyceride lubricant to diffuse slightly, extending onto the sides of the indentations, facilitating release of the stereotype from the matrix. Because of the non-volatile, non-drying nature of the neat's foot oil, the finished matrices do not deteriorate on standing for long periods and the casting surface is preserved. The strong contrast between the color of the flog and the ink provides for ease in identification of matrices so that mistakes in shipment and use are minimized. Invented by Frank E. Reilly, Chicago, Illinois. Assigned to Electrographic Corporation, New York, N. Y. Application January 27, 1944. 2 claims.

**2,401,727. STEREOTYPE PLATE CASTING** for casting recesses in the back of cylindrical plates, imposing circumferential tension in order that the plate will fit tightly against the cylinder despite high speeds or pressure. The casting box consists of a



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core provided with recesses, a drag pivotally mounted with respect to the core, and a border strip mounted on the core and extending axially. Inserts, movable inwardly and outwardly, are mounted in the recesses in the core. As the casting box is closed and opened, a cooperating means carried by the core and pivotally mounted on the border strip and drag, move the inserts outwardly and downwardly. Invented by Frank A. Foster, Melrose Park, Illinois. Assigned to The Goss Printing Press Company, Chicago, Illinois, Application November 16, 1943. 4 claims.

#### Printing Inks and Related Chemicals:

2.400.519. **VEHICLES FOR STEAM-SET PRINTING INKS** which are dried quickly by application of steam to the freshly printed web or sheet to give prints that are rubproof and will not offset when re-wound or stacked. One example is a vehicle consisting essentially of a non-aqueous solution in a liquid polyglycol of a water-miscible salt formed by reacting substantially equi-molecular proportions of an amine and a resin having an acid number between 60 and 305. The vehicles are not "set" on printing rollers and plates even by atmospheres of 100% relative humidity. They are excellent binders for pigments. Invented by John W. Kroeger, Drexel Hill Plaza, and Daniel J. O'Connor, Jr., Yeadon, Pennsylvania. Assigned to Frederick H. Levey Co., Inc., New York, N. Y. Application July 26, 1944. 4 claims.

2.401.581. **UNSATURATED ESTERS AND POLYMERS THEREOF** prepared by treating unsaturated salicylate, such as allyl or chlorocrotyl salicylates, etc., with phosgene to form the corresponding chloroformates. The polymers of the esters may be mixed with pigments or resins to produce opaque or transparent coatings suitable for paper, wood, metal, leather, cloth, etc. Invented by Irving E. Muskat, Glenside, Pennsylvania, and Franklin Strain, Norton Center, Ohio. Assigned to Pittsburgh Plate Glass Company, Pittsburgh, Pennsylvania. Application November 25, 1942. 8 claims.

2.401.755. **TEXTILE PRINTING COMPOSITION** of pigment dye printing pastes, printing gums, or printing thickeners. The process utilizing the composition imparts a permanent finish to textile fabric or paper as a part of the general operation of printing and is suitable for roll or screen printing. Synthetic resins are not required. The printing composition, which becomes an integral part of the finished material, employs a water dispersible or hydrophilic film forming binder, preferably an amyloseous substance, a natural gum or reactive material, and a fixing agent. The material is heated either before or during the dyeing or printing operation. A suitable fixing agent may be an antimony compound, preferably potassium pyroantimonate. With variation in dyes, the invention is applicable to any textile material or paper. Invented by Ira L. Griffin, Dave E. Truax, and Norman H. Nuttall, Charlotte, North Carolina. Assigned to Stein, Hall & Company, Inc., New York, N. Y. Application February 12, 1941. 16 claims.

2.401.898. **ALKALI-RESISTANT, OXIDIZABLE BINDER** for soap wrapper ink vehicles, or the like, which must be resistant to the free alkali of the soap and the detergent effect of the soap. The binder comprises a coumarone or indene resin dissolved in a resin-modified drying oil comprising the esterification products of polyethers of pentaerythritol higher than the diether with a drying oil fatty acid and a resin acid, the resin modified drying oil being present in proportions to form a stable solution of the resins when cold. Carbon black or a suitable colored pigment may be incorporated into the vehicle to form a printing ink having the desired soap-resistant qualities. Invented by Isidor M. Bernstein, Brooklyn, New York. Assigned to H. D. Roosen Company, Inc., Brooklyn, New York, by mesne assignments. Application September 13, 1943. 6 claims.

2.402.075. **THERMOSETTING POLYVINYL COMPOSITIONS**, useful in inks, produced by curing vinyl compositions selected from the class consisting of polyvinyl acetals and polyvinyl alcohols. The method consists in admixing the compositions with aluminum stearate as a curing agent and then reacting together the materials by subjecting the mixture to temperatures ranging from 275 to 310°F. for 30 to 45 minutes. Invented by Emil E. Novotny, Prospectville, George K. Vogelsang, La Mott, and Ernest E. Novotny, Philadelphia, Pennsylvania. Assigned to Durite Plastics, Incorporated, Philadelphia, Pennsylvania. Application March 5, 1943. 2 claims.

2.402.106. **IMPROVED STABILIZER FOR PRINTING PASTES** from a diazonium salt preparation. A heterocyclic compound is selected from the class consisting of the sulfonic acid of quinaldines, pyridines, thiophenes, furanes, cumarines, pyrazoles

and the water-soluble salts of the sulfonic acids. Invented by William Henry von Glahn, Loudonville, and William Leo Walsh, East Greenbush, New York. Assigned to General Aniline & Film Corporation, New York, N. Y. Application September 9, 1942. 4 claims.

#### Printing Presses and Equipment:

2.400.632. **MACHINE FOR IMPROVED SECTION PRINTING**, or panel printing, of hemmed curtains, bedspreads, table cloths, etc., which obviates misprinted sections in borders or hems of such articles when printed in web form or before cutting and hemming. Fabric sections are passed between an impression cylinder and a traveling endless stencil web having a perforated area through which a design or pattern is transferred to fabric. Blocking strips are arranged to cover a portion of one



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end of the perforated area so that the length of the printed design may be adjusted, making it possible to print a long or short design on curtains of various lengths. A gripping strip on stencil web extends the full width of web and frictionally holds the leading edge of curtain fabric as it passes between the stencil and the impression cylinder. The gripper strip is heavy enough to automatically free the leading edge of the curtain fabric by dropping away from the edge as the stencil leaves the impression cylinder. Invented by George W. Darenberg, Freeport, New York. Unassigned. Application November 23, 1942. 8 claims.

2,400,966. MULTI-UNIT ROTARY MULTI-COLOR PERFECTING PRINTING MACHINE in which the freshly printed web is dried by heating and then cooling it immediately following the printing of each impression. Arrangement is such that the freshly printed surface of the web does not engage any part of the printing machine until the ink is sufficiently dried. Each printing unit includes a form cylinder and an impression cylinder. Web-guide rollers and web-cooling rollers are so constructed as to guide and support the web in loop formation and, in cooperation with operatively adjacent printing units, to print a number of impressions on one side of the web. The web of the loop is guided through a heating chamber and then around a cooling roller before the printed surface of the web engages a guide roller. An additional printing unit is outside the loop, and means are provided to reverse the web entirely within the loop so that the reversed web is guided from within the loop to the additional printing unit. Invented by Adolph M. Zuckerman, New York, N. Y. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application June 30, 1943. 3 claims.

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## Peacetime Education

Discussed by NGAEA

THE twenty-first annual Conference on Printing Education was held at Benjamin Franklin Hotel, Philadelphia, on June 13, 14 and 15.

James F. Newcomb struck the keynote of the conference by discussing Printing's "Investment in Education." He cited facts to show that from 1911 to 1914 the industry derived much profit from an educational program second to none in the American industrial field.

R. V. Mitchell, Chairman of the Board, Harris-Seybold Co., asserted that the lithographic industry is out and out for education. However, he spoke against the rapid rise of too many schools specializing in training workers for the lithographic industry.

Another strong advocate for industry's participation in education was Chas. R. Conquergood, President, Canada Printing Ink Co., Ltd., Toronto.

Others who stressed the industry phase of Graphic Arts Education were Harry L. Gage, Vice President of Mergenthaler Linotype Co., who had just returned from an extensive trip; Craig R. Spicher, Director of Research, Miehle Printing Press & Mfg. Co., and T. G. McGrew, New York Employing Printers Association.

A number of other prominent speakers assisted in filling out a heavyweight program.

At the business meeting, closing the conference, the following were elected officers of the National Graphic Arts Education Association for the year 1946-47: President, Byron G. Culver, Supervisor of Dept. of Publishing and Printing, Rochester Institute of Technology, Rochester, N. Y.; Vice President, George J. Belsey, East High School, Cleveland, O.; Secretary, Walter E. Brock, Presidio Junior High School, San Francisco, Calif.; Treasurer, Vincent C. Coyne, Middlesex County Vocational School, New Brunswick, N. J.; Educational Director, Fred J. Hartman, Washington, D. C. Regional Vice Presidents are: Patrick F. Boughal, The New York School of Printing, New York; Hartley E. Jackson, Div. of Industrial Arts, San Jose State College, San Jose, Calif.; Frederic J. Brudi, Berendo Junior High School, Los Angeles, Calif.; James A. Gahan, School of Graphic Arts, Montreal, Can.; William Van Gasbeck, El Paso Technical Institute, El Paso, Tex.; Ralph E. Graber, Liberty Memorial High School, Lawrence, Kan.; Fred J. Landon, Dunwoody Institute, Minneapolis, Minn.; Guy D. Rummell, Crane Technical High School, Chicago, Ill.; James A. Shields, Thomas A. Edison Vocational School, Elizabeth, N. J.; Patrick J. Smith, Roxbury Memorial High School for Boys, Roxbury, Mass.; Joseph F. Sorace, Rochester Institute of Technology, Rochester, N. Y.; Herbert Warfel, Joliet Township High School, Joliet, Ill.; with additional regional vice presidents to be chosen by the Board of Directors.

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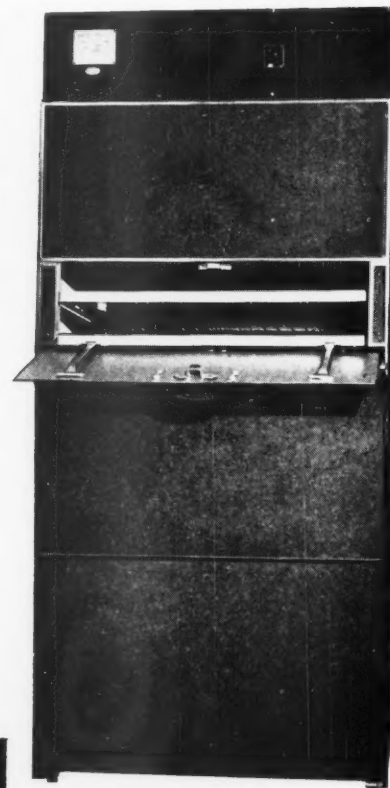
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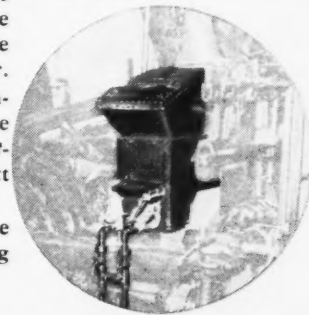
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# Mountains and Mole Hills

By an Old Timer

**Y**ES SIR, a small obstacle can seem like a mountain if you look at it from the wrong angle. Like the time publication of Colonel Albert's little four-page weekly, *The Argus* was held up two days on account of the first elevator slide lower adjusting screw working loose on his line-composing machine. It was like this: I had just finished work for the day and was standing before the little mottled mirror in the wash room trying to pat down a long since departed stubborn strand of hair back to its rightful place when I felt a trembling hand on my shoulder. I turned to see Colonel Albert looking at me through the reading section of his bifocals.

"Hello! Colonel" I says, "How be you?"

"Son", he says, "I've got a mighty heap of trouble. Here 'tis Friday and my paper should have been out yesterday and my typesetin' machine is broken down and I've only about two-thirds of the type up." "Son", he says, "I've got my hoss and buggy tied to the persimmon tree out front and I can run you around to my place in a jiffy, and Son, I'll sure be much obliged if you'll help me out this time."

"All right Colonel," I says, "I'll grab my tool kit and we'll be off."

After much clucking and a few whip lashes we arrived at the Colonel's establishment. Now, the Colonel published his paper in the basement of his residence, setting the type on an old Model 1 Linotype and from a few type cases.

The machine had been stalled in transfer position with a line of matrices in the first elevator jaws and with a batch of copy on the copy board.

"You see," said Colonel Albert, "this here thing you call the second elevator was coming down too far to line up with this other thing, the first elevator, so I took a hammer and chisel and roughed up the underside of the second elevator bar plate which helped for a while but not for long, so I was surely stumped. So young fellow, if you fix it you will win an old man's gratitude."

I lifted the second elevator and looked at the under side of the bar plate. It was the crudest job I have ever seen.

"Colonel," I says, "you are a genius. In fact I don't believe anyone else would have thought of adjusting them that way. But just think, how much easier it would have been to have turned up this first elevator slide lower adjusting screw a little, and say, Colonel Albert," I says, "this adjusting screw has worked loose and has caused all of your trouble."

"Youngster," he says, "I wish you would show me how to adjust this confounded elevator business so that I can fix it myself next time."

"Alright Colonel," I says, "as soon as I have erased some of the effects of your handiwork we'll go into that."

So when I had filed away the ridges left by the chisel, I says, "Now Colonel,

we'll make the necessary adjustment at the transfer point. But first, Colonel, just step to the rear of the machine. This short stout spring is known as the second elevator lever adjusting spring and together with the bolt with the two nuts, the relation of the second elevator to the cam is varied. You will notice that the cam roll is free from the low part of the cam when the machine is in transfer position as it is now. When the second elevator has ascended to deliver the mats to the distributor this bolt with the two nuts should be loose enough to turn with the fingers."

"Always be sure Colonel," I added, "that this adjustment is correct before you make the transfer adjustment."

"Well, how about this first elevator adjusting screw business?" inquired the Colonel.

"Oh! we're coming to that," I replied as we returned to the front of the machine.

"First, Colonel," I says, "Let's turn up on this first elevator adjusting screw a little and get rid of this line of matrices before we make the final adjustment."

So after we had returned the matrices to the magazine we proceeded to eliminate the Colonel's predicament.

"Hand me a piece of that white paper, Colonel," I says, "Now we will place it in the transfer channel over near the spaceband box. Now we will place the light so that it will throw light on the paper which will aid us in making the alignment."

"Now we will run the machine around until the first elevator is part way up to the transfer point where we stop the machine, insert a pi matrix in the first elevator jaws, lock the spaceband lever, allow the first elevator to advance to the transfer point and slide the matrix up near the second elevator bar, like this."

"Now, Colonel Albert, look at the end of the second elevator bar toward the light. You will notice the matrix is still a little too high to align with the bar. Now," I says, "while I turn up on this adjusting screw at the lower end of first elevator slide, you look closely and tell

me when you can see a tiny border of light on all sides between the teeth of the matrix and those of the bar."

"There! I think you have it," exclaimed the Colonel with a long delayed smile.

Sure enough, it looked like a perfect job, so we tightened the lock nut and sent a few lines through to test it out.

"Well, is that all there is to it?" asked the Colonel.

"Not quite," I replied, you noticed that the small rim of light showed equal on both, front and back sides between the matrix and bar. Well, that is not always the case. Sometimes the front side of the bar plate has become worn and allows the bar to set too far forward to align with the first elevator jaws. This not only causes faulty transfer but brings about undue wear on the matrices."

"What's the remedy for that?" inquired the Colonel.

"If the plate is badly worn," I says, "it should be replaced but if it shows but slight wear, the first elevator guide—this casting here at the top—may be adjusted by loosening these three cap screws here at the top and turning in or out these two small adjusting screws at the back side of the elevator guide, until the matrix teeth show equal light front and back and then tighten the cap screws."

"Well, young fellow, I surely am grateful for all this help and information," declared the Colonel, "and now I got to get busy but first, let me take you upstairs and introduce you to my daughter, Pearle. She'll drive you home in the hoss and buggy."

After that, I was glad the Colonel's machine went haywire.

## Electronic Timer Bulletin

Electronic Controls, Inc., describes its electronic interval timer Model 1029 in a bulletin. This timer can be used in industrial applications requiring precise time control, such as lithography, blueprinting, photostating, plating, plastic molding, production control, photography, etc. Bulletin gratis for the asking through company named above or *Printing Equipment Engineer* will be glad to pass along your request.

## Census Bureau to Make Special Study of Printing and Publishing and Allied Industries

**A** SPECIAL industry study of the printing, publishing and allied activities in 1945 has been announced by the Bureau of the Census. The survey is being made by the Bureau in response to the request of Printing Industry of America, Inc., the American Book Publishers Council, the National Publishers Assn., and other leading trade associations.

The purpose of the survey is to determine how the paper supply has been distributed, how much of the printing done in 1945 was of a wartime nature, where new business may be found to replace it,

and to aid in the location of idle machinery and equipment which might be put into productive use.

The inquiries indicate that the survey will show not only the volume of printing and publishing in various categories, as in previous years, but also the type of machinery in use and idle as of December 31, 1945, the percentage of government printing, and the amount of paper consumption by types of paper. Printers whose total dollar receipts were \$50,000 or less in 1945 are reporting separately on a simplified form.



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## Hess & Barker's 4 to 6 Color Press cuts production and maintenance cost 'way down

Three presses operating in two nearby plants for more than seven years have accumulated very interesting production and maintenance figures. In one plant, a million hairline register 4 color coffee bags (4 up) were delivered in less than 28 hours. On another regular million run, an ink saving of \$138.00 was made. There is no risk with Hess & Barker's 4 to 6 color press, because it has been severely tested for seven years and proved successful in two different plants.

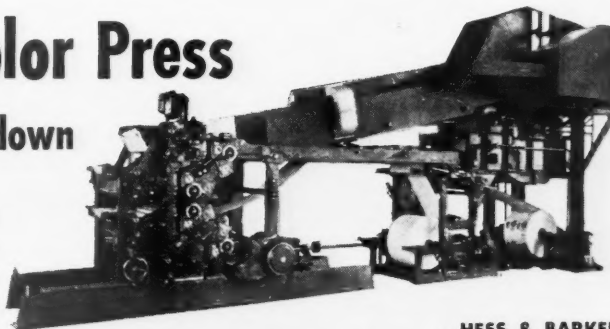
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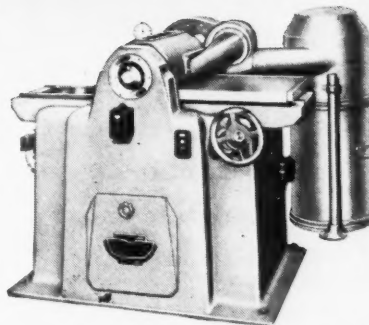
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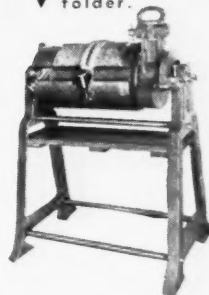
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# IOWA EXECUTIVES *hold first postwar newspaper mechanical conference — Machinists have meeting concurrently*

By STAFF WRITER

OVER 200 newspaper mechanical executives and manufacturers and supplier representatives registered for the eighteenth annual meeting of the Iowa Daily Newspaper Mechanical Conference Sunday, May 19, at Hotel Fort Des Moines, Des Moines, Iowa. Many who had intended to attend were unable to do so because of the threatened railroad strike, which had been called for the previous Saturday.

There was the usual get-together on Saturday evening. Due to hotel shortage the business of the conference was limited to one day.

The conference was opened at 9:00 a. m. by President Val Wells, Assistant Mechanical Superintendent of the Des Moines Register-Tribune.

Arthur T. Gromley, Business Manager of the Register-Tribune, welcomed the delegates and in his remarks stressed the importance of picking and training young men to become competent to fill the various executive positions.

Demonstrations and informal discussions, instead of prepared papers, comprised the program of the various sessions.

It was decided to hold a three day conference in 1947, if hotel conditions will permit. The selection of next year's conference city was left to the new officers of the 1947 conference.

Arthur Schmeichel, Composing Room Foreman of the Muscatine Journal, was chosen president; John Hardiman, Composing Room Foreman of the Des Moines Tribune, vice president, and Paul Kamler, of the Clinton Herald, was reelected secretary-treasurer for the tenth consecutive term.

## Composing Room Session

Arthur Schmeichel, Muscatine Journal, was chairman of the Composing Room session.

James F. Cowden, Cedar Rapids Gazette, discussed the relative merits and adaptability of plastic plates. It was re-

solved to request that uniform thickness be maintained. Some difficulty was experienced in routing and trimming. A zinc saw or an engraver's guillotine were given as the best methods for trimming plates. Electrotypes thickness was suggested as the proper thickness gauge for plastic plates.

Composing room lighting came in for considerable discussion. It was pointed out by Charles Henschell, Mechanical Superintendent of the St. Louis Post-Dispatch, that where two 40-w. fluorescent bulbs were used that by adding another bulb, or using the three bulb 40-w. unit, increased the lighting efficiency at least 50 per cent. For best all purpose illumination it was suggested that the fixtures be hung at about 11 ft. from the floor. A reading of 50 to 60 candlepower for makeup and ad bank working surface was recommended.

Considerable discussion was given to the use of 1 and 3 pt. column rules. Two papers represented were using 1 pt. steel, others, 3 and 4 pt. One paper using a 65 in. width roll figured the saving in print at three-fourths of one per cent.

In regard to apprenticeship training it was brought out great care must be exercised in the selection of the trainee, and if the newspapers are to have sufficient competent help in the future that closer attention must be given to their training by those in charge of composing rooms. Many are training floor men to become operators, due to the scarcity of competent operators.

## Something New

### THE DOUTHITT TEMPERATURE CONTROLLED COLD TOP DEVELOPING TANK ★ ★

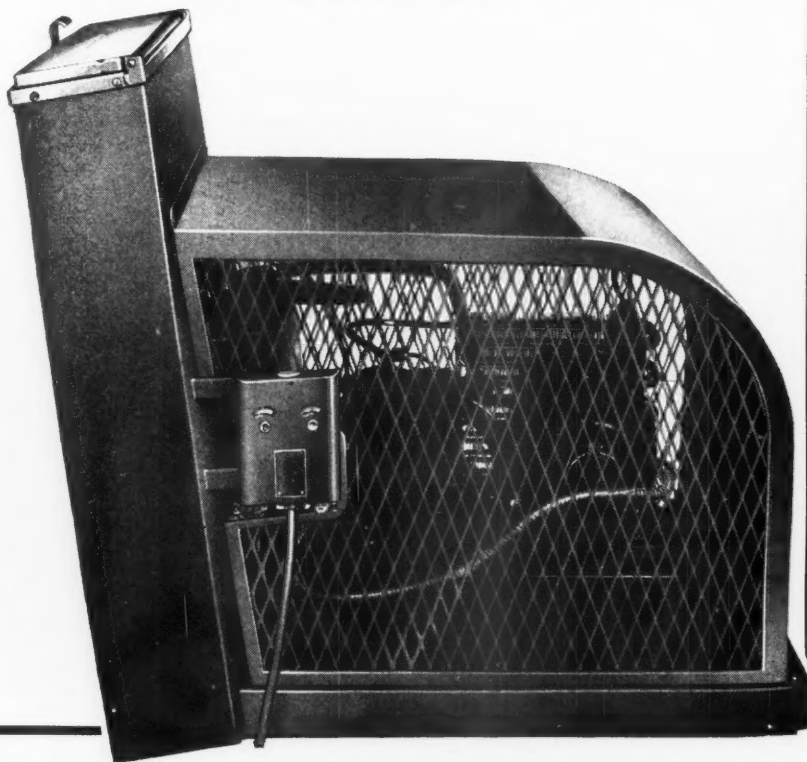
Maintains even temperature of the "Cold Top Developer" at all times, thereby providing uniform developing time and consistent uniform plates.

Eliminates most of the difficulties previously experienced in "Cold Top" development.

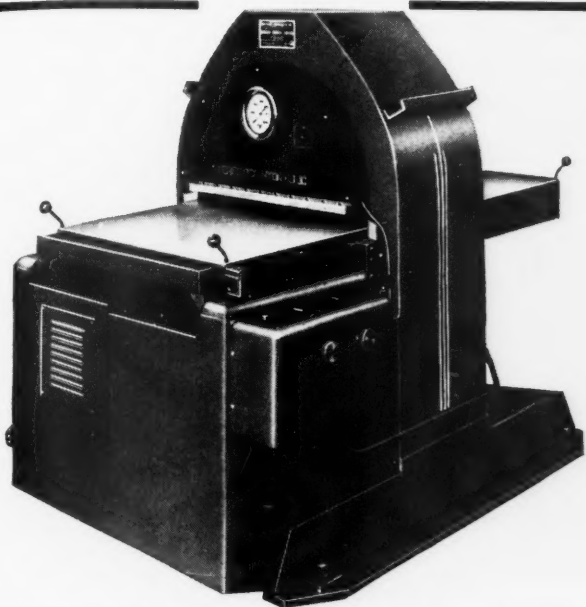
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*of the*  
**STEREOTEX**  
*Hydraulic Matrix Press*



COMPARISON sells more Stereotex Presses than all the salesmen in our organization. Comparison shows that the Stereotex Press has greater pressure capacity and many exclusive features. Experts know that there is nothing else like it—nothing else near it.

*They know* that performance and built-in quality are the factors that count most—NOT the number of presses of any one make now in use.

*They know* that the Stereotex Press will do all any competitive machine will do—and a good deal more.

*They know* that any time in the future—when the demand for baked mats increases—the standardized Stereotex Press can be equipped with dual vacuum plates or with tilting front and rear platens.

*They know* that such a conversion can be made quickly in the user's own plant, thereby providing for changing requirements and protecting his investment.

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*For better pictures—cleaner type matter—blacker solids—mold by Stereotex Direct Pressure!*

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**T**HE better the printer, the more important his production . . . and the more valuable his time! That's a most important reason for giving him the time-saving advantages of Hamilton Equipment.

With Hamilton Equipment he works easier, more conveniently, with fewer interruptions. He doesn't have to stop work frequently to hunt for needed materials, because Hamilton Equipment makes it possible for every compositor and lock-up man always to have an ample supply of material at his finger-tips or in easy reach.

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Are you thinking about re-arranging your composing room for better production? Get a free copy of the booklet, "Clean House for Profits," containing layout sheet and miniature illustrations to scale of composing room equipment, together with helpful suggestions. Write us, or phone your Hamilton dealer.

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**MANUFACTURING COMPANY**

TWO RIVERS, WISCONSIN



**Officers of Iowa Newspaper Mechanical Conference** — (left to right): Paul Kamler, Composing Room Foreman, Clinton (Ia.) *Herald*, Secretary-Treasurer; Arthur Schmeichel, Composing Room Foreman, Muscatine (Ia.) *Journal*, President; John Hardiman, Composing Room Foreman, Des Moines *Tribune*, Vice President.

Due to scarcity of material and labor trouble, many shops are experiencing difficulty in keeping in stock a supply of sorts matrices for news dress. In one of the larger papers each operator is required to check his machine at the starting and ending of each shift. This is easily done by keeping 20 mats in the first 8 or 10 rows of the lower case channels.

Many advertisers and advertising agencies are requesting that some type of letter, other than the body type of the paper where straight composition is used in display advertising. This does not apply in the larger cities, but mostly on papers in towns under 60,000. One paper recently put in 8 pt. Bodoni, with italic, and another is figuring on 8 pt. Garamond with italic to dress up its dis-

play advertising columns. Both of these papers are using a 7 pt. dress on 8 pt. body for news composition.

Marion Dingman, Machinist at the Cedar Rapids *Gazette*, explained the workings of an old saw he revamped especially for angle cutting. This saw is set up for angle work at all times thereby eliminating the lost time where machines have to be set up each time so used.

#### Press and Stereotype Departments

Earl Caldwell, Sioux Falls (S.D.) *Argus-Leader*, was chairman of the press and stereotype session.

The merits of plastic plates were fully discussed. Closer uniformity as to thickness was one of the problems presented. Also it was brought out that it was not believed plastic plates tended for better reproduction over electrotypes.

Newsprint came in for general discussion and comparisons of different papers were made. It was the general opinion that much is to be desired in the uniformity of texture and color.

Control of mat shrinkage was generally discussed. Other topics were color printing, metal, blankets, plate shavers, etc.

#### Engravers' Session

The engravers' meeting was held in the plant of the *Register-Tribune*. Scott Anderson, of the Eastman Kodak company, explained the Kodagraph Contact Screen processes, and put on a working demonstration as to its basic improvements in the methods of photolithographic halftone reproduction. It is claimed to make possible the securing not only of sharper and finer detail, but also improved tone rendering, especially in the middletones and high lights.

Al Meyers, of the Harold M. Pitman Co., spoke on and demonstrated the Pitman Verse-Print process. The usual method of producing a reverse zinc from copy requires making a positive from the negative. Verse-Print process eliminates the need of the second film and the other photographic supplies used in making it.

The discussions then centered around the problems confronting the engravers on the smaller daily newspapers.

#### Iowa Linecasting Machinists' Association

Each year the Iowa Linecasting Machinists' association meets in conjunction with the Iowa conference. Carl Bloomburg, Chief Machinist at the *Register-Tribune*, is president of the linecasters and presided at the meeting.

An extemporaneous talk was given by Mr. Ferricks, representative of the Ludow Typograph Co. He explained the functions and adjustments of the Ludow. Mr. Ferricks stressed the importance of proper mouthpiece vent slots, which should be approximately 0.015 in. deep; also, more solid slugs are produced when metal level is maintained  $\frac{1}{2}$  in. from the top of the metal pot. Frequent use of Ludlow Lubriclean will prevent scale and allow free movement of plunger. Lubriclean was also recommended for

This low-priced unit is ideal for the smaller printer and publisher . . . or as an auxiliary for the larger plant. More than 700 miters an hour may be cut direct from strip material . . . right and left hand at a single cut. Accurate, perfectly matched corners can be produced on any rule including light hairlines.

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stuck plungers and is used by many machinists on line-casting machine pot crucible mouthpieces.

Mr. Reed, of Minneapolis, spoke on plunger fitting and suggested for best results, a clearance of 0.003 in. or 0.004 in.

Mr. Hoadler of Burlington, in answering "What measuring tool to be used to get the most accurate circumference of the pot well?" stated the use of feeler gauges between plunger and well gives the most accurate measurement.

It was brought out in the discussions that a machinist in a Pennsylvania plant had some aluminum pistons made and with 0.005 in. clearance when cold, they expand to size of the well when hot. It was stated that it would not be long before aluminum plungers would be used in all line-casting machines.

It was also stated aluminum plungers do not oxidize as readily as cast iron plungers and require less frequent cleaning. Frequent metal analysis was also recommended. Engraver's charcoal was reported to be an excellent mold cleaner. It was an accepted fact that the more often a mold is cleaned the more it is necessary to clean it. A clean mold tends to heat more readily than one the surface of which is oxidized.

M. L. Dingman, Cedar Rapids Gazette, asked "What causes slugs to stick in the mold and what is the best remedy?" Some blamed it on the metal, others to the use of too much flux. Some suggested cleaning plungers more often. A machinist stated that in his plant the plungers are cleaned about once a month, and he never has stuck slugs.

This question led to a discussion of what to use on the back mold wiper for lubricant. One maintained he never puts any lubrication on the wipers and stated he had got away from back squirts. Another maintained if he did not use a lubricant he would have back squirts. It was the opinion of the majority that the best lubricant for back mold wipers was either animal fat and fine graphite, or vegetable oil and graphite—never lubricating oil or grease.

The officers of the Iowa Linecasting Machinists association for 1947 were elected as follows:

President—Carl Bloomburg, Register-Tribune, Des Moines, President; Cy Morse, Dubuque, Vice President, and Bud Hourihan, LaCrosse, Wis., Secretary-Treasurer. Re-elected to the executive committee were Neff Sowerwine, of the Register-Tribune, Des Moines; T. C. Keene, Waterloo Courier, and Leo Rosenberger, Clinton Herald.

### Photo-Lithographers' Convention

The fourteenth annual convention of the National Association of Photo-Lithographers will be held in the Shoreham Hotel, Washington, D. C., October 3, 4 and 5. The program will be devoted to labor, costing, selling and production. Exhibits will be held. The Board of Directors of the NAPL will meet 10 a. m. Wednesday, October 2.

## Flattening and Drying Stereo

### Mats for Better Plates

**T**ROUBLE is sometimes experienced in shops where stereotypes are cast in small casting boxes. The mat not being flat and all of its moisture not removed, produces a bad casting.

Earl A. Funk, owner of a print shop at Wymore, Neb., has solved the problem without much extra work. When he gets ready to cast stereotype plates, he first pours a full size blank cast. When the metal is cool enough so that the metal will not run out, the box is turned down and opened. The largest mat waiting to be cast is then put on top of the blank cast. The box closed and is permitted to remain that way until the mat has been steamed dry. It is then removed as is also the blank cast. The mat is then returned to the box with bearers and a plate is cast.

Before taking this plate out of the box, the next mat waiting to be cast is put on top of the still hot plate and the casting box is closed until the mat is steamed dry. Then the casting box is opened. The dried-out mat, the first-cast plate and the mat from which it was cast are removed. The dried mat is then put in place and cast as before. This operation is repeated, working from the largest mat to the smallest.

This simple method dries the mats thoroughly before they are used for casting and prevents wrinkling of the mat. The only extra work required is the pouring of the blank cast at the start. After that each casting is used to steam-dry the next mat to be cast.



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## Finger Nail Enamel For Platen Makeready

IN the Groh Printing Shop at Emporia, Kans., platen press makeready is done with fingernail enamel such as is used by the ladies to make themselves more beautiful. A bright red finger nail enamel is used because it is more easily seen on the tympan paper. With the fine brush that comes with the bottle of finger nail enamel a thin coat is painted on the tympan paper to bring out parts of type that do not get enough impression. The enamel dries quickly. In case one coating of the enamel is not enough, a second may be applied to build up the makeready to the desired point. As much as a 0.006 in. layer of the enamel may be built up.

## Planning Printing Plant

(Continued from Page 58)

and engineers were overwhelmed by an unprecedented volume of work, have enjoyed many advantages in the way of greater deliberation and more special attention to their problems. It should be

obvious that, faced with tremendous amounts of work and with staffs which reflect the toll both of the depression and war years, these limited technical facilities will have to be shared by many and every effort made to extend their services as broadly and fairly as possible. Someone is going to have to wait for service, and anything that the printer or publisher can do to facilitate the solution of his own problems will expedite his improvement program.

There are many things which can be done in this direction—things which help toward a clear cut statement and definition of the problem itself. Moreover, they are basic factors which can be resolved only by first hand knowledge and experience.

Among the questions which the printer or publisher may well ask himself, and for which he can profitably seek answers are these:

- (a) How much growth in circulation or business volume should be anticipated?
- (b) How much expansion of plant size and facilities will that growth require?
- (c) Is present location and site the right one?
- (d) What changes in processes, products or type of business can be anticipated for the future?


Aside from consolidation with, or the acquisition of competitive enterprises,

growth in business volume usually bears a more-or-less definite relationship to community growth. As the community grows, its enterprises and businesses grow. The growth prospects, both as to population and business trend, vary widely in communities. The U.S. Department of Commerce has compiled figures on a great many cities and communities and has set up estimates as to whether they will grow or recede.

It is probable that any printer or publisher who has established a business in a community has far better criteria available for predicting its future than outside sources could supply. What is important is that to the best of his ability he project the probable service demands of his community, into the reasonable future and estimate the facilities he will require to meet those demands. Growth prediction, at its best, is not an exact science, and the years may bring many variables, but probabilities favor the man who intelligently attempts to measure these factors and prepare for them.

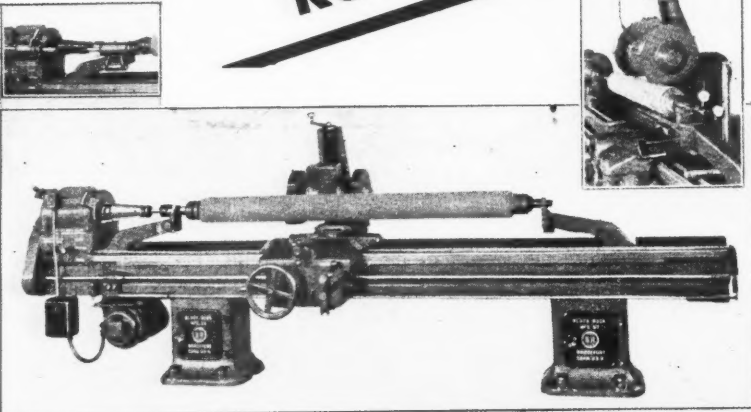
### Use of Space Determines Value

Efficiency in the use of space varies so widely that it should be the subject of constant study by every operator. Department heads and executives should be encouraged constantly to analyze, critically, the use that is being made of the space under their control. To repeat advice given many times in these pages,

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**Model 4 L  
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Grinds at any point from Top to Back  
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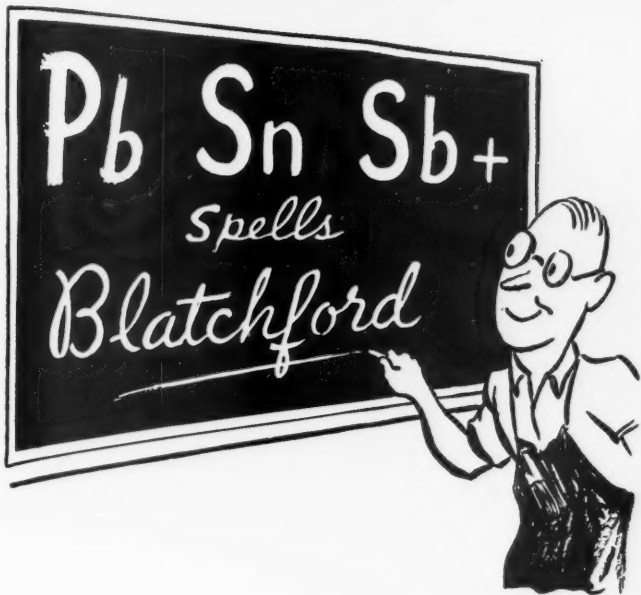
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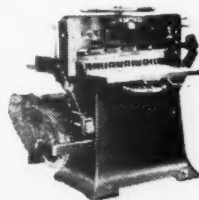


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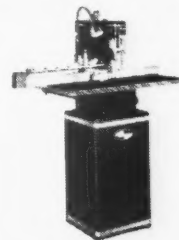


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a large scale layout of the space being used, with templates simulating the shape and size of equipment items, should be available at all times and encouragement or instructions given that a running inventory of space use be kept in operation. Analysis of this kind is of immeasurable help in making provision for growth and expansion. The amount of space that is presently being used by a department or operation is not reliable criteria as to future needs unless the space is being efficiently utilized. It is the use that is being made of space, not its amount or shape that determines its value. Undoubtedly more printing operations are being handicapped by lack of space than be excessive space, but far more of them suffer from poor utilization of available space. Having established the goal you expect to reach in circulation or business volume, the space and facilities required to produce that volume are but a projection of present space and facilities, if those quantities are efficiently related to your present operations.

In many communities developments in growth, traffic and other characteristics have taken place through the years which affect the desirability of the present site and location. The growth and expansion which business has enjoyed are likely also to have an influence on site and location, both from the viewpoint of the delivery of raw materials and the dispatch of the finished products. When these factors appear to suggest the advisability of a new location it is generally desirable, particularly if two or more sites are under

## Research at LTF

By W. E. GRISWOLD\*

*\*Executive Director, Lithographic Foundation. Abstracted from report submitted May 1946, to the officers and directors' annual meeting.*

**T**HE budget approved by the board of directors for 1946 is \$150,000 to meet as many needs as possible. It is based on anticipated income. The income is estimated to derive from interest on endowment, new and renewing annual dues, income from sale of manuals, texts and research publications, and from special gifts.

We have over 600 lithographic plant contributors, over 200 manufacturing and jobbing supplier contributors, 23 foreign members, and over 700 contributing members. I don't think you need any further explanation of the advantage that would accrue from having the cost spread more widely. There are more than 2100 lithographers and the number of ink, paper, machinery and equipment manufacturers and jobbers who should be participating on an annual dues basis is several times that number.

Our research committee can and should become the best technical clinic in the industry able to determine the real needs for research, maintain balance as between the different directions research should take, and help increase practical cooperation with the private research laboratories through removal of duplication and conflict.

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If this interests you, please write, giving us an outline of your press, composition and bindery facilities. We have paper.

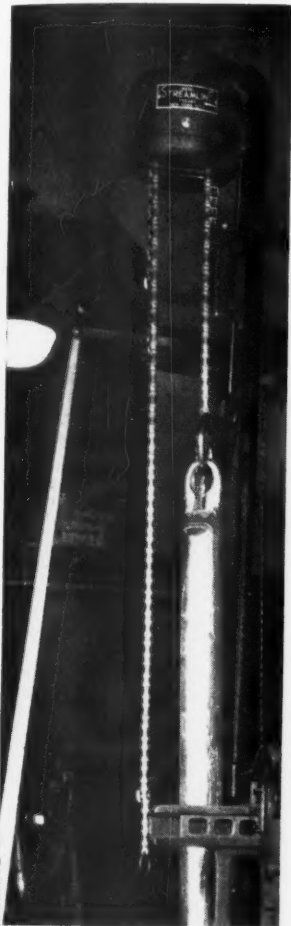
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*Streamline* is the most efficient and practical feeder developed for use on Mergenthaler and Intertype type-casting machines.

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consideration, to have some preliminary architectural analysis made of their adaptability to plant layout. This is a valuable contribution your architect can make, usually at little or no cost to you, and, added to your own analysis of local traffic conditions and other trends, can do much to assure a wide choice of site and location. It should be emphasized, particularly for newspaper operations, that railroad trackage and other facilities for the delivery of newsprint and other raw material represents a very important economic item. Other factors, such as availability to the public, real estate values, etc., obviously call for consideration.

The changes in methods, processes, equipment, etc., which have affected printing and publishing operations during the past few decades will probably be greatly exceeded in the years to come. Some of these changes will consist of the further development and perfection of things already accepted and established. Others will be revolutionary. No program for the future dares ignore them. Granted that they cannot all be foreseen or provided for, the least we can do is be aware of trends and developments, and not be caught "flatfooted" when they occur. Above all, the possible changes and developments the future may bring add

their weight in favor of flexibility—the utmost flexibility—in the planning and construction of new plants or the improvement of existing ones. The necessity for flexibility can not be too strongly emphasized.

These are a few of many things you can do in the way of pre-planning your plant improvements. With most of them your architect can help you. In fact it is greatly to your advantage to retain his services in the earliest stages of your thinking. But—he will have to depend upon you for much basic information and if you have it organized and ready for use it will be advantageous to everyone concerned with the building program.

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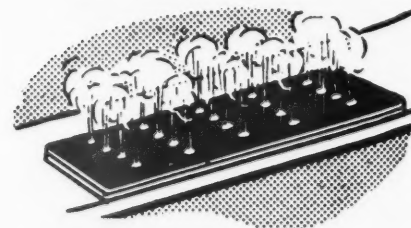
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pot mouthpiece become heated from repetitive casting. Sufficient time between casts does not elapse to permit the metal in the slug to solidify quickly. Under these conditions, two important mechanical solidifying actions of the metal are prevented, i.e., the residual heat of the mold retards solidification thus causing some of the still molten metal to be withdrawn from the mold cell into the pot throat when the plunger rises after having made its casting stroke. Another abnormal action of the metal also takes place. The slowness of metal solidification prevents formation of a bridge-like structure in the metal by reason of collapse of the still molten metal in the mold cell due to its own weight. Thus the residual heat in the molds retards metal solidification, the metal collapses and forms large air bells or pockets usually under the letter characters of the slug in just the place where solidity to resist stereotype molding pressure is required. The withdrawal of a portion of the molten metal back into the crucible throat through the mouthpiece induces enlargement of the pockets. The remedy here would seem to be slower operation of the machine to avoid superheating the mold itself.

Display machines should be equipped with mold-cooling blowers. However, the operator should be instructed in the proper use of the continuous type of blower which is not automatically turned on and off by a thermostat which in turn is actuated by the mold temperature. Indiscriminate or continuous use of the blower may produce such low

temperature in the mold that the letter characters on the slug will cast with a rough face. The rough face, in turn, will reproduce in the stereotype plate and print gray. The thermostatically controlled mold-cooling device recently announced by Intertype eliminates necessity for the operator paying any attention to the cooling device. A thermostat located just back of the mold in use determines whether or not the temperature of the mold is such that air cooling is necessary.

#### Water-Cooling Molds

Referring specifically to mold cooling by water on the Linotype, extremely low temperature water should not be used too freely. If the temperature of the water (seasonal or otherwise) is low, the rate of flow through the mold disk hub should be cut down to a trickle. If a display mold is not used for a while and the water temperature is low, the mold will be too cool for slug-casting purposes and a large-slug mold may cast with imperfect faces.

#### "Gray" Type Faces

It will be noticed that in improperly cast slugs most of the imperfections such as slightly grained effects tend to appear near the lower extremities of the characters. These imperfections may be accounted for partly by the manner in which the metal is injected into the mold cell when casting conditions are not as they should be. The metal is in-

jected into the mold along its smooth or constant side. It flows in a horizontal line until it strikes the tops of the letters (the matrices being in upside down casting position). As the metal impinges against the matrix letter characters it loses its original directional flow. The top part of the letters cast without trouble, but the lower part of the letters (being in upside down or upper position in front of the mold cell) may cast with a disturbed face if the mechanism and metal temperature are not maintained properly, because while the mold cell is filling with metal, the metal is also already in process of solidification.

#### Air Displacement and Weaker Plunger Spring Tension

The goal at which to shoot in casting headletter slugs is to maintain the casting mechanism in such manner that the air bells remaining in the structure of the slug will be well broken up and distributed in the upper part of the slug body. When molten metal is injected into the mold cell, the air in the cell must be displaced. The completeness of the displacement determines the solidity of the slug. It is not possible in all cases to eliminate all of the air, but the bells must be kept to minimum size and well distributed through the slug body, particularly under the letter characters, in order to produce a metal structure resembling bridging rather than to have large size bells or air pockets immediately underneath the type face. The large pockets

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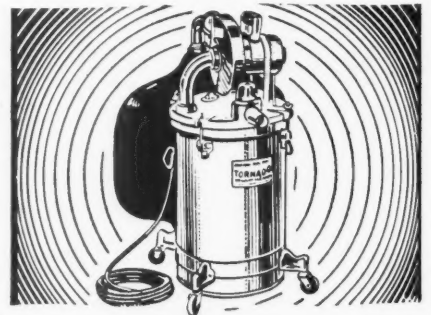
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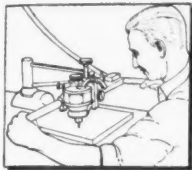
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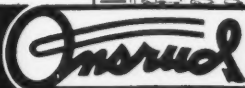
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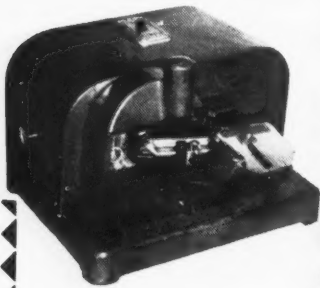
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In some newspaper composing rooms, the quick-drop pot pump plunger device is never used. Contrary to ideas previously held by many machinists, the pot pump plunger spring tension is reduced by at least one-third. The theory is that when the quick-drop device is used the metal enters the mold with such force as to actually diminish the escape of air from the mold cell. By reducing the pressure of the casting stroke of the plunger, and thus slowing down the force of the metal stream, a longer time interval is provided between casting and solidifying for the air in the mold to escape through the mouthpiece vent slots.

**Mouthpiece Temperature**

An important detail in connection with casting headletter slugs is to maintain the mouthpiece at a suitable temperature. This temperature is somewhere in the neighborhood of 510 deg. F. A rough approximation of this temperature may be obtained by drawing slowly a piece of 2 pt. machine-cast rule of 5½ pt. slug across the mouthpiece by its edge. The rule or slug should leave a slightly tinned trail on the mouthpiece.

**Overheight Slugs**

Overheight headletter molds provide slugs which lend themselves to better print in the paper. These molds are 0.878 in. thick (0.003 in. thicker than stand-

ard). The extra thickness is added to the front of the mold. The reason for casting headletter slugs 0.003 in. higher than 0.918 in. is that most headletter slugs are reduced in height in the first stereotype molding process. The extra height helps print blacker type face in the paper. If it is not possible for you to order an extra height mold, the back trimming knife on the machine may be backed away from the mold to increase the height of the slug. While this is not as satisfactory a means for securing the added slug height, the print of the slugs will be improved.

The foot of the ribs on headletter slugs are several thousandths of an inch shorter than the wall or body part of the slug after the slug has been trimmed by the back knife. To give added support to the lower part of the slug face two methods are utilized. If your pot mouthpiece has not been treated to secure the additional means of support it would be well to treat them right away.

Mergenthaler Linotype Co. mills one or two horizontal slots as needed across the face of mouthpieces for machines in which display slugs are to be cast. The ribs, of course, are cast on the foot of the slug ribs and are trimmed by the back knife in the same manner as the jets and vent sprues.

**Rib Support for Molding Pressure**

Another method employed for obtaining support for the rib feet is to drill shallow depressions with a ⅛ in. twist

drill in the mouthpiece exactly where each rib will be cast with a small button, as shown in the accompanying halftone illustration at 7.

If the suggestions given in this article have been applied, particularly with reference to "pumping" the machine at rush time, printable slugs will be obtained without difficulty. The equipment is such that this type of slug can be gotten—it only remains to apply the necessary maintenance care and operating procedure.

**Cold Shots in Type Faces**

What may be called cold shots in the type face are caused when the mold is hot and the mouthpiece fails to break clean. That is, some of the metal which should form the jets on the bottom of the slug remains in the mouthpiece jet holes. Before the next slug is cast, the metal in the jet holes becomes molten. When the next line is cast this metal is first to be injected into the mold. Even though this metal be molten its temperature is not sufficiently high enough to cause it to be in the same state of fluidity as the metal in the pot crucible. Perhaps its contact with the constant side of the mold cell may start slight solidification; in any event, it is the first to contact the "cold" surfaces of the letter characters in the matrices. The result is a cold shot wherever the metal strikes the matrix faces. The remedy is obvious—correct metal and mouthpiece temperatures.

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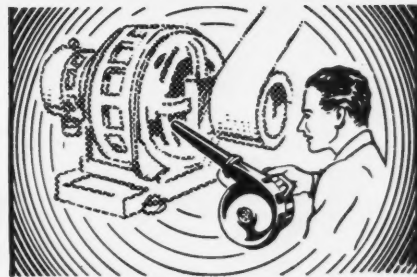
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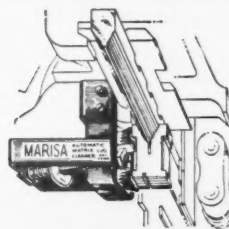
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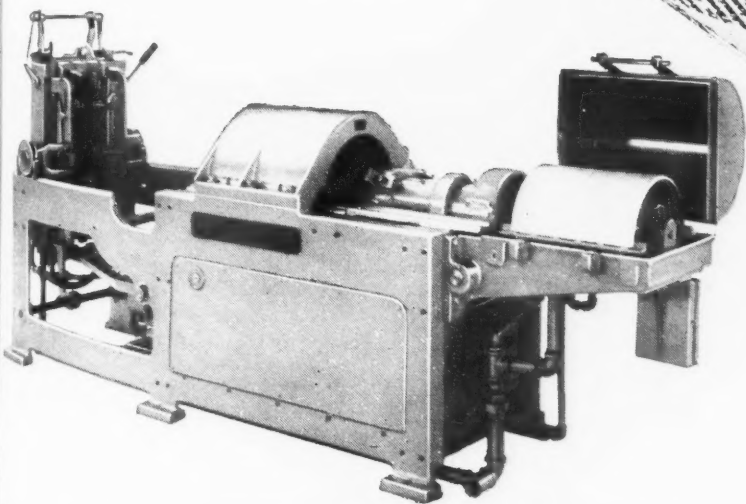
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